

# 2014 ABCs Neonatal Infection Expanded Tracking Form Instruction Sheet

*Updated 12/19/2013*

This form should be completed for all cases of early- and late-onset group B *Streptococcus* disease (GBS). Early-onset is defined as GBS disease onset at 0-6 days of age [(culture date-birth date) <7 days]. Late-onset is defined as GBS disease at 7-89 days of age [6 days < (culture date-birth date) <90 days]. This case report form for GBS disease can be completed on infants born at home, but **not** for stillbirths.

Additionally, this form should be filled out for *all* neonatal sepsis cases, which includes both GBS and non-GBS cases. Neonatal sepsis is defined as invasive bacterial disease onset at 0-2 days of age [(culture date-birth date) <3 days]. Case report forms for neonatal sepsis cases should **not** be completed on infants born at home or stillbirths. For those sites participating in neonatal sepsis surveillance, please refer to the Neonatal Sepsis protocol for clarification on the inclusion and exclusion criteria.

The following is an algorithm of which forms should be filled out for early- & late-onset GBS cases meeting the ABCs case definition:

| <b>FORMS<br/>SCENARIO</b>                    | NNS Surveillance Form | Neonatal Infection<br>Expanded Tracking<br>Form* | ABCs Case Report Form |
|--|-----------------------|--|-----------------------|
| Early-onset (& Neonatal Sepsis) <sup>†</sup> | √                     | √  | √                     |
| Late-onset                                   |                       | √  | √                     |

\*The Neonatal Infection Expanded Tracking Form is the expanded form that combines the Neonatal Sepsis Maternal Case Report Form and the Neonatal group B *Streptococcus* Disease Prevention Tracking Form.

<sup>†</sup> For CA, CT, GA, and MN, please refer to the Neonatal Sepsis Protocol for the algorithm on which forms should be filled out for neonatal sepsis cases meeting the case definition

## GENERAL INSTRUCTIONS

The sources of information that should be used to complete this case report form are found in both the infant’s chart and mother’s delivery chart and include the following: 1) Neonatal Summary Sheet, 2) Neonatal & Maternal Discharge Summary, 3) Neonatal & Maternal Admitting History & Physical (H & P) form, 4) Physician Orders, 5) Physician & Nurse’s Progress Notes, 6) OB Admitting Form, 7) Prenatal Forms, 8) Labor Flow/Progress Record, 9) Labor & Delivery Summary, 10) Drug/Medicine Administration Records (MARs), and 11) Laboratory & Microbiology Reports. **For general reference and guide to neonatal and obstetric charts, please reference Table 1.**

It is only necessary to collect information that is readily available in the medical chart. *Very often charts will only tell you that something happened. Charts will not tell you that something did NOT happen.* For example, if a woman had a previous anaphylactic reaction, this will be noted in the chart. If you can’t find mention of it in the chart, then you would answer “No” to this question. Sometimes, we can tell the difference between “No” and “Not documented/Unknown”. For example, the question ‘Intrapartum temperature >100.4°F’ can truly be answered “Yes” or “No”. In the case where the mother’s temperature was not documented because the chart was incomplete, you would check “Unknown”. For yes/no/unknown questions, CHECK UNKNOWN when something is unknown rather than leaving it blank.

**Conventions for filling out form:**

Record all times as military time (i.e., 1:00pm = 1300 and 1:00am = 0100). Valid time values are 0000 (12:00 AM) to 2359 (11:59 pm). All dates should be recorded as Month/Day/4-Digit Year: 05/16/79 = 05/16/1979. Be careful around January and December; it's easy to forget to change the year when a record spans this period.

**Patient identifier information (NOT transmitted to CDC)**

|                        | Definition             | Special Instructions/Notes            |
|------------------------|------------------------|---------------------------------------|
| Infant's Name          | Infant's name          | Last name, first name, middle initial |
| Infant's Chart No.     | Infant's chart number  |                                       |
| Mother's Name          | Mother's name          | Last name, first name, middle initial |
| Mother's Chart No.     | Mother's chart number  |                                       |
| Mother's Date of Birth | Mother's date of birth |                                       |
| Hospital Name          | Name of hospital       |                                       |

**Patient identifier information (transmitted to CDC)**

|  | Definition  | Special Instructions/Notes   |
|--|---|--|
| Culture date                               | Indicate the <b>date of collection</b> of the first positive culture, not the date when the culture was first noted to have growth. | <b>NOTE:</b> The culture date should match the culture date on the ABCs CRF and/or the Neonatal Sepsis CRF.  |
| State ID                                   | ABCs case unique identifier.  | Each ABCs site has its own system of assigning a unique ID to each case. In general, the first 2 spaces designate the location and are followed by 5 numbers. This state ID is assigned by ABCs personnel.<br><br><b>IMPORTANT:</b> The state ID links all information pertaining to this particular case including the ABCs CRF and potentially the lab isolate form and neonatal sepsis CRF. |
| Hospital ID                                | The hospital where the infant was born.   | Please note the name of the hospital of birth on the form; the hospital ID will be assigned by ABCs personnel.<br><br>Please leave blank, if the infant was born at home.<br><br><b>NOTE:</b> The hospital of birth should match the hospital of birth on the ABCs CRF and/or the Neonatal Sepsis CRF.   |
| Were labor and delivery records available? | Indicate whether or not the labor and delivery medical records were available to the abstractor at the time of chart review.        |  |

### Infant Information: Questions 1-10

Generally, if an infant was readmitted to the same hospital for an infection after the initial discharge, the baby will only 1 have chart. If the baby was discharged (went home) and then was readmitted for an infection to a different hospital, the baby will have 2 separate charts.

|   | Definition  | Special Instructions/Note   |
|---|---|---|
| 1. Date and time of birth                                 | Record infant's date and time of birth.   | <p>If both the infant's date and time of birth are missing, mark the "Unknown" checkbox. If the infant's date of birth is known but the time of birth is missing, indicate the date of birth and mark the "Unknown" checkbox. If the infant's time of birth is known but the date of birth is missing, indicate the time of birth and mark the "Unknown" checkbox.</p> <p>The unknown box should only be checked if the date, time, or both variables are missing but have been looked for in the charts.</p> <p><b>NOTE:</b> The date and time of birth should match the date and time of birth on the ABCs CRF and/or the Neonatal Sepsis CRF.</p>  |
| 2. Did this birth occur outside of the hospital?          | Please record whether the birth occurred outside of a hospital and check "Unknown" if it can't be determined during chart review. | <p>If the birth occurred outside a hospital, please check one of the options for where it occurred: home, a free standing birthing center, en route to hospital (e.g., in a car or ambulance), or other.</p> <p><b>NOTE: Case report forms for neonatal sepsis cases should NOT be completed on infants born at home or stillbirths.</b></p>  |
| 3a. Gestational age of infant at birth in completed weeks | Record gestational age of infant at birth. "Gestational age" refers to <u>completed weeks</u> .                                   | <p>If gestation is estimated as 36 weeks and 6 days, the gestational age entered should be 36. Do not round up on the gestational age.</p> <p>If gestational age at birth can't be determined and is unknown, record gestational age as "99".</p> <p>If discrepant values for gestational age are found throughout the chart, the gestational age should be calculated based on the dates given for the last menstrual period (LMP). Gestational age is calculated from the first day of the mother's last menstrual period, not from the date of conception, to the date of birth.</p> <p><b>NOTE:</b> The gestational age at birth should match the gestational age on the ABCs CRF and/or the Neonatal Sepsis CRF.</p> |
| 3b. Date of maternal last menstrual period (LMP)?         | Record the date of the mom's last menstrual period as related to this infant case.  | If the date of the mom's last menstrual period as related to this infant case can't be determined and is unknown, check the "unknown" checkbox. (2012)  |
| 4. Birth weight   | Indicate weight at birth in pounds (lbs) and ounces (oz) <u>OR</u> in grams (g).  | <b>NOTE:</b> The infant's birth weight should match the infant's birth weight on the ABCs CRF and/or the Neonatal Sepsis CRF.   |
| 5. Date and time of newborn discharge                     | Record the date and time of discharge of the newborn from the <b>birth hospital</b> .   | If both the infant's date and time of hospital discharge are missing, please mark the "Unknown"   |

|  | Definition  | Special Instructions/Note  |
|--|---|--|
| from the birth hospital  |   | <p>checkbox. If the infant’s date of hospital discharge is known but the time of hospital discharge is missing, indicate the date of hospital discharge and mark the “Unknown” checkbox. If the time of hospital discharge is known but the date of hospital discharge is missing, indicate the time of hospital discharge and mark the “Unknown” checkbox.</p> <p>The unknown box should only be checked if the date, time, or both variables are missing but have been looked for in the charts.</p> <p>We ultimately want to capture those infants who were discharged from the birth hospital too soon and were readmitted to the hospital with sepsis. If the infant is transferred from the birth hospital without being discharged home first, record the date of transfer as the date of discharge from the hospital of birth. The total length of hospitalization stay for a continuous hospitalization will be captured on the ABCs CRF.</p> <p><b>NOTE:</b> For neonatal sepsis cases, the date and time of discharge from the hospital of birth should match the date and time of discharge from the hospital of birth on the Neonatal Sepsis CRF.</p> |
| 6. Outcome   | Record whether the infant survived, died, or the outcome was unknown. This pertains to the outcome of the hospitalization and not necessarily to outcomes ascribed to the particular neonatal infection.                    | <b>NOTE:</b> Outcome should either match the outcome on the ABCs CRF and/or the Neonatal Sepsis CRF.   |
| 7. Was the infant discharged to home and readmitted to the birth hospital? | Record whether or not an infant was readmitted to the <b>birth hospital</b> from home. Only answer “Yes” to this question for infants that were discharged home and then were readmitted from home to their birth hospital. | <p><b>**For early- &amp; late-onset GBS cases only**</b></p> <p>If the infant was readmitted to the birth hospital (after first being discharged home), record the date and time of readmission.</p> <p>If both the infant’s date and time of readmission to the birth hospital from home are missing, mark the “Unknown” checkbox. If the infant’s date of readmission is known but the time of readmission is missing, indicate the date of readmission and mark the “Unknown” checkbox. If the infant’s time of readmission is known but the date of readmission is missing, indicate the time of readmission and mark the “Unknown” checkbox.</p> <p>The unknown box should only be checked if the date, time, or both variables are missing but have been looked for in the charts.</p>   |

|  | <b>Definition</b>  | <b>Special Instructions/Note</b>  |
|--|--|---|
| 8. Was the infant admitted to a different hospital from home?  | Record whether or not an infant was readmitted to a hospital, other than the birth hospital, from home. Only answer “Yes” to this question for those infants that were discharged home (or born at home) and then were readmitted from home to a different hospital from their birth hospital.           | <p><b>**For early- &amp; late-onset GBS cases only**</b></p> <p>If an infant was transferred to a new hospital <b>without discharging to home first</b>, answer “No” to this question. Information about this transfer will be picked up in the ABCs CRF.</p> <p>If the infant was readmitted to a different hospital from home, record the hospital ID (which will be different than the birth hospital ID) as well as the date and time of readmission.</p> <p>If both the infant’s date and time of readmission to the different hospital from home are missing, mark the “Unknown” checkbox. If the infant’s date of readmission is known but the time of readmission is missing, indicate the date of readmission and mark the “Unknown” checkbox. If the infant’s time of readmission is known but the date of readmission is missing, indicate the time of readmission and mark the “Unknown” checkbox.</p> <p>The unknown box should only be checked if the date, time, or both variables are missing but have been looked for in the charts.</p> |
| 9a. Were <b>any</b> ICD-9 codes reported in the discharge diagnosis of the infant’s chart?                                       | The ICD-9 codes are standardized, alphanumeric codes which often have decimal places (e.g., ###.## or 123.45) that classify diseases by etiology and anatomic localization.  | <p><b>**For early- &amp; late-onset GBS cases only**</b></p> <p>Please record whether there were <b>any</b> ICD-9 codes reported in the discharge diagnosis of the infant’s chart, regardless of disease classification or diagnosis – we would like to know if ANY ICD-9 codes were recorded for that infant. If there are none, check “no” and move to Question 10.</p>   |
| 9b. If ICD-9 codes are present, were any of the following ICD-9 codes reported in the discharge diagnosis of the infant’s chart? | Record if any of these additional ICD-9 codes, potentially related to infant GBS infections, were in the discharge diagnosis of the infant’s chart.<br>- 041.02: Streptococcus, group b<br>- 038.0: Streptococcus septicemia<br>- 041.0: Streptococcus, unspecified<br>- 320.2: Streptococcal meningitis | <p><b>**For early- &amp; late-onset GBS cases only**</b></p> <p>Check whether any of the following ICD-9 codes were present in the discharge diagnoses. Check all that apply.</p>   |
| 9c. Were <b>any</b> ICD-10 codes reported in the discharge diagnosis of the infant’s chart?                                      | The ICD-10 codes are standardized, alphanumeric codes which often have decimal places (e.g., ###.## or 123.45) that classify diseases by etiology and anatomic localization.<br><br>Starting in October 2014, hospitals will transition from use of ICD-9 codes to ICD-10 codes.                         | <p><b>**For early- &amp; late-onset GBS cases only**</b></p> <p>Please record whether there were <b>any</b> ICD-10 codes reported in the discharge diagnosis of the infant’s chart, regardless of disease classification or diagnosis – we would like to know if ANY ICD-10 codes were recorded for that infant. If there are none, check “no” and move to Question 10.</p>   |

|  | Definition   | Special Instructions/Note  |
|--|--|--|
| 9d. If ICD-10 codes are present, were any of the following ICD-10 codes reported in the discharge diagnosis of the infant's chart? | Record if any of these additional ICD-10 codes, potentially related to infant GBS infections, were in the discharge diagnosis of the infant's chart.<br>-A40.1: Sepsis due to streptococcus, group B<br>-A40.9: Streptococcus sepsis, unspecified<br>-B36: Bacterial sepsis of newborn<br>-B36.0: Sepsis of newborn due to streptococcus, group B<br>-B36.1: Sepsis of newborn to other and unspecified streptococci<br>-B95.1: Streptococcus, group b as the cause of diseases classified elsewhere<br>-B95.5 Unspecified streptococcus as the cause of diseases classified elsewhere<br>-G00.2: Streptococcal meningitis | <b>**For early- &amp; late-onset GBS cases only**</b><br><br>Check whether any of the following ICD-10 codes were present in the discharge diagnoses. Check all that apply.                  |
| 10. Did baby receive breast milk from mother?  | Record whether the baby received breast milk from the mother.  | <b>**For late-onset GBS cases only**</b><br><br>If "Yes", also indicate whether the baby received breast milk before onset of GBS infection (e.g., date of first positive neonatal culture). |

### Maternal Information: Questions 11-31

Maternal labor and delivery information might be separated or in several sections for the first stage of labor compared to the second stage of labor.

|  | Definition  | Special Instructions/Note   |
|--|---|---|
| 11. Maternal admission date and time               | Record the <i>earliest</i> admission date and time for the mother that can be found in the chart. The hospital admission record may show a Labor & Delivery admission time that is a bit later than other sources (mainly because the woman may be admitted on the floor and receiving care before she is actually in the computer's system). | If both the date and time of the maternal admission are missing, mark the "Unknown" checkbox. If the date of maternal admission is known but the time of maternal admission is missing, indicate the date of birth and mark the "Unknown" checkbox. If the time of maternal admission is known but the date of maternal admission is missing, indicate the time of maternal admission and mark the "Unknown" checkbox.  |
| 12. Maternal age at delivery                       | Record the maternal age at delivery in years (do not round up).   | If age is not specifically listed in the chart, you will need to subtract the delivery date from the maternal date of birth.  |
| 13. Maternal blood type                            | Record the maternal blood type as noted in the chart.   | If a blood type and screen was ordered, check the laboratory information section.   |
| 14. Did mother have history of penicillin allergy? | Allergy to any drug belonging to the penicillin class of antibiotics counts as a penicillin allergy.  | This class includes: penicillin G, penicillin V, amoxicillin, ampicillin, nafcillin, ticarcillin (combined with clavulanic acid = Timentin), Augmentin (amoxicillin and clavulanic acid), Zosyn, and many others. The abbreviation "NKDA" stands for "No known drug allergy". Please check "No" to maternal history of penicillin allergy if this is noted in the chart.<br><br>Be careful when recording history of anaphylaxis. Though a person can have a penicillin allergy, they may not have had an anaphylactic reaction. If |

|   | Definition   | Special Instructions/Note  |
|---|--|--|
|   |  | <p>penicillin allergy is “Yes”, but there is no further documentation of type of reaction, check “No” for history of anaphylaxis. If penicillin allergy is “Yes” and includes notation of anaphylaxis (most common), shock, required ICU/hospitalization, intubated, vascular collapse, severe allergy, immediate hypersensitivity to penicillin, angioedema urticaria, respiratory distress, check “Yes” for history of anaphylaxis. If there is description of a milder penicillin allergy (e.g., rash, diarrhea, etc), check “No” to history of anaphylaxis.</p> <p>If a woman has an allergy to penicillin, the allergy will be noted in the chart. If a woman has had an anaphylactic reaction, this will also be noted in the chart. Therefore, the checkbox for these two questions should either be “Yes” (as noted in the chart) or “No” (no allergy and/or anaphylaxis noted in the chart). There should be no “unknowns”.</p> |
| 15. Date and time of membrane rupture   | Record the date and time of membrane rupture. If the mother has ruptured membranes on admission, the date and time of the rupture of membranes (ROM) will be on the OB admission form. If membranes are intact on admission, the ROM date/time can be found on the L&D summary and/or the L&D/obstetric flow sheet. If membranes are ruptured at the time of C-section, record the time that the C-section began as ROM date and time. | If both the date and time of the maternal ROM are missing, mark the “Unknown” checkbox. If the date of maternal ROM is known but the time of maternal ROM is missing, indicate the date of birth and mark the “Unknown” checkbox. If the time of maternal ROM is known but the date of maternal ROM is missing, indicate the time of maternal admission and mark the “Unknown” checkbox.   |
| 16. Was duration of membrane rupture $\geq 18$ hours?                                 | To calculate ROM $\geq 18$ hours, subtract the ROM date & time from the delivery date & time.  | Sometimes the precise time that membranes ruptured will not be known, but it will be evident that at least 18 hours elapsed between ROM and delivery (e.g., ROM occurred prior to admission and there were 20 hours between admission and delivery). In such cases, check “Yes” for ROM $\geq 18$ hours, even though the exact date & time may be unknown.   |
| 17. If membranes ruptured at $<37$ weeks, did membrane rupture before onset of labor? | Using gestational age at birth, record whether membranes ruptured before the onset of labor. If membrane rupture occurred earlier than 37 weeks gestation, check “Yes”.  | Though every pregnancy is different and no list can cover all situations, the onset of labor is usually defined by the following signs: dilation of cervix; contractions that are increasingly longer, stronger, and closer together; and loss of mucous plug and/or vaginal discharge (also known as when a woman’s “water breaks”).  |
| 18. Type of rupture   | Spontaneous and artificial rupture of membranes may be abbreviated as SROM and AROM, respectively.   | If membranes are ruptured at the time of C-section, list type of rupture as “artificial” (and record the time of membrane rupture from the operative report in Question 15 (date & time of membrane rupture)).   |
| 19. Type of delivery  | Record the type of delivery. More than one delivery option may be checked (e.g., a mother has a vaginal birth but forceps and/or vacuum is used to suction the baby out of the birth canal).<br><br>Forceps and vacuum data may be listed  | If the delivery was by C-section, answer the questions about whether labor or membrane rupture occurred before the C-section was performed (if membrane rupture was artificial, as part of the C-section procedure, do not answer yes to this question). The abbreviation “VBAC” stands for “Vaginal Birth After previous C-section”.  |

|   | Definition  | Special Instructions/Note   |
|---|---|---|
|   | under a “Complications” section of the medical chart. Additionally, a section called “Indications for C-section” may be included in the chart.  | <p>As noted, every pregnancy is different and no list can cover all situations, however, several physiological signs are potential indicators labor is beginning. Some common signs that labor is imminent include the following: rupture of membranes, dilation of cervix, contractions that are regular at ~5 minutes apart, and sudden increase or decrease in fetal activity (note: this list is <i>not</i> exhaustive and should not be used as a checklist).</p> <p><b>NOTE:</b> Both dilation of the cervix and contractions can start long before delivery and may not necessarily be synonymous with labor starting. Please use what is recorded in the medical chart to help guide abstraction.</p>   |
| 20. Intrapartum fever                                 | Record if the mother’s intrapartum (IP) temperature was greater than 100.4°F or 38.0°C. If a mother had an IP fever, record the date and time the fever was first recorded greater than 100.4°F or 38.0°C.  | <p>This question <b>ONLY</b> refers to the mother’s temperature <u>during labor</u> (not after delivery). Do not look in any postpartum assessment sheets. If there is a complete medical record and there is no mention of IP fever, answer “No” to this question, not “Unknown” (fever is something important that would almost always be recorded). Only check “Unknown” if sections of the medical chart dealing with maternal temperature are missing.</p> <p>In the medical charts, there is often a column and/or graph dedicated to vital stats (e.g., temperature/BP/pulse). Be careful when interpreting temperature on these graphs; sometimes pulse and temperature will be charted on the same graph.</p> <p>If both the mother’s date and time of IP fever are missing, mark the “Unknown” checkbox. If the mother’s date of IP fever is known but the time of IP fever is missing, indicate the date of IP fever and mark the “Unknown” checkbox. If the mother’s time of IP fever is known but the date of IP fever is missing, indicate the time of IP fever and mark the “Unknown” checkbox.</p> <p>The unknown box should only be checked if the date, time, or both variables are missing but have been looked for in the charts.</p> |
| 21. Were antibiotics given to the mother intrapartum? | Intrapartum (IP) refers to the period from the onset of labor until the delivery of the infant. However, for the purpose of prophylaxis, IP is defined as the period from rupture of membranes (ROM) to delivery, or admission to the hospital for labor until delivery (whichever is longer). Thus, intrapartum antibiotics (IAP) refers to antibiotics given during labor and prior to time of birth (i.e. delivery). | <b>Once the infant is delivered, the intrapartum period is over.</b>  |

|  | <b>Definition</b>   | <b>Special Instructions/Note</b>   |
|--|---|--|
| 21a. Date and time antibiotics were first administered before delivery | Record the date and time antibiotics were administered, <i>not</i> the date and time antibiotics were ordered from the Physician's Order Forms.   | <p><b>NOTE:</b> Just because an antibiotic was ordered, does not mean it was given/administered.</p> <p><b>NOTE:</b> Nurses' notes can be confusing as often a time is written down for when a medication is scheduled, but then crossed out with initials to show that it was given at a different time. If you can't find the time an antibiotic was given, be suspicious. You may be looking at a sheet that only shows when an antibiotic is scheduled or ordered. Antibiotics ordered will be written in the MD orders.</p> <p>If both the mother's date and time of IAP administration are missing, mark the "Unknown" checkbox. If the mother's date of IAP administration is known but the time of IAP administration is missing, indicate the date of IAP administration and mark the "Unknown" checkbox. If the mother's time of IAP administration is known but the date of IAP administration is missing, indicate the time of IAP administration and mark the "Unknown" checkbox.</p> <p>The unknown box should only be checked if the date, time, or both variables are missing but have been looked for in the charts.</p>  |
| 21b. Antibiotic's name, delivery, dose, and date of administration     | List the name of each antibiotic given, mode of delivery, number of doses, start date and if antibiotics were terminated before delivery, stop date (leave stop date blank if it does not apply). | <p>Be careful to verify that ordered antibiotics were actually administered. Common antibiotics that you may see include: Penicillin, Ampicillin, Gentamicin, Clindamycin, Erythromycin, Vancomycin, and Cefazolin. If an antibiotic name is not recorded, but it is evident in the chart an antibiotic was administered, write "ND" or "Not Documented". Do not leave blank unless no antibiotics were given.</p> <p>IV refers to "intravenous" administration of antibiotics. IM refers to "intramuscular" administration of antibiotics. PO refers to "oral" administration of antibiotics.</p> <p>In the case of a C-section delivery, only antibiotics administered <i>before</i> clamping of the umbilical cord should be noted. If antibiotics are administered after clamping of the cord, they are considered postpartum.</p> <p>In the case of preterm rupture of the membranes (at &lt;37 weeks), sometimes women receive multiple antibiotics over a long time period before delivering. There is a space to record 6 antibiotics. If a woman has received more than 6 antibiotics, list all IV antibiotics first and make a note in the comments field at the end of the form about the other antibiotics administered.</p> |

|   | <b>Definition</b>  | <b>Special Instructions/Note</b>  |
|---|--|---|
| 22. Interval between receipt of first antibiotic and delivery           | Subtract the date and time antibiotics were first administered from the date and time of delivery to determine the time interval between receipt of first antibiotics and delivery.  | If either the date and time of first antibiotic administration or the date and time of delivery are unknown, enter "999" for hours, "99" for minutes, and "99" for days.<br><br>The day variable should only be completed if the number of hours between receipt of first antibiotic and delivery is greater than 24 hours.                   |
| 23. What was reason for administration of intrapartum antibiotics?      | Doctor's progress notes will often mention why IAPs were administered. Many hospitals have standing orders for GBS prophylaxis, C-section prophylaxis, suspected amnionitis or chorioamnionitis, prolonged latency, and mitral valve prophylaxis. There may have been more than one reason for antibiotic prophylaxis in which case, check all that apply. | The checkboxes on the form are the key/trigger words to look for in the charts to help determine why IAPs were given. Please do not make a clinical judgment. If it is not possible to determine the reason for administration of antibiotics, check "Unknown".<br><br><b>NOTE:</b> Suspected amnionitis and chorioamnionitis are equivalent. |
| 24. Did the mother have chorioamnionitis or suspected chorioamnionitis? | Record whether the medical record noted the mother to have chorioamnionitis or suspected chorioamnionitis, independent of receipt of intrapartum antibiotics.  |   |

**\*\*\*QUESTIONS 25 thru 33 REFER TO EARLY-ONSET & LATE-ONSET GBS CASES ONLY\*\*\***

|  | <b>Definition</b>   | <b>Special Instructions/Notes</b>  |
|--|---|--|
| 25. Did mother receive prenatal care?  | Prenatal, or antenatal, care refers to the medical and nursing care recommended to women before and during pregnancy.<br><br>Specific prenatal care information and data on the expectant mother is usually forwarded to the hospital to be included in the maternal labor and delivery chart. Prenatal data can be found on ACOG forms, which are usually pink or yellow with "ACOG" printed in the upper-left or right corner. However, some prenatal providers may use another form and/or notation to record prenatal care. | If a mother received no prenatal care, there are usually multiple notations on the absence of prenatal care through all sections of the chart. If there is only partial prenatal information in the chart, do not leave question 25 blank.<br><br>If there is no prenatal information in the maternal labor and delivery chart to determine whether a mother had any prenatal care, as well as no mention of prenatal care in the admission notes or H&P, check "Unknown".   |
| 26. Number of prenatal visits AND dates of the first and last prenatal visits. | If there are prenatal records in the labor and delivery chart, record the total number of prenatal visits as well as the date of the first and last prenatal visit.   | The date of last prenatal visits refers to the last recorded visit in the prenatal record forwarded to the hospital. This may not have been the woman's last visit before birth; however, it will be important to calculate the gestational age at the time the prenatal information of the mother was forwarded to the hospital for labor & delivery.<br><br>If the prenatal record was not in the chart, some information can be recovered from other areas of the chart. A prenatal visit will be recorded by a physician or other clinicians such as a nurse. A visit to a lab only does <b>not</b> count as a prenatal visit. |

|   | Definition   | Special Instructions/Notes   |
|---|--|--|
|   |  | <p>If there is no prenatal information in the maternal labor and delivery chart, as well as no mention of prenatal care in the admission notes enter “99” for the number of prenatal visits.</p> <p>If both the mother’s first and last date of prenatal visits are missing, mark the “Unknown” checkbox. If the mother’s first date of prenatal visit is known but the last date of prenatal visit is missing, indicate the first date of prenatal visit and mark the “Unknown” checkbox. If the mother’s last date of prenatal visit is known but the first date of prenatal visit is missing, indicate the last date of prenatal visit and mark the “Unknown” checkbox.</p> <p>The unknown box should only be checked if the first date, second date, or both variables are missing but have been looked for in the charts.</p> |
| 27. Estimated gestational age at last documented prenatal visit | <p>In the provider notes of the maternal prenatal record, turn to the last documented date of the prenatal visit. If gestational age at the last documented prenatal visit is available as weeks and days, record the exact age in weeks and days; do not round up. Use the number of days after the decimal place (e.g., 36.4 = 36 weeks and 4 days) to convert the gestational age to a decimal value. For example, 36.4 should be converted to 36.57 (36 weeks and 4/7(=.57) days).</p> <p>If gestational age is available as days only, convert the gestational age from days to weeks + days. For example, 207 days = <math>207/7 = 29</math> weeks, 4 days (because <math>7*.47=4</math>). However, the correct gestational age to record would be 29.57 (because 4/7 days is 0.57).</p> | <p>Acceptable values for gestational days are: 0, 1=.14, 2=.29, 3=.43, 4=.57, 5=.71, and 6=.86.</p> <p>If discrepant values for gestational age are found throughout the chart, the gestational age should be calculated based on the dates given for the last menstrual period (LMP). Gestational age is calculated from the first day of the mother’s last menstrual period, not from the date of conception, to the date of the last documented prenatal visit.</p> <p>If there is no prenatal information in the maternal labor and delivery chart, as well as no mention of prenatal care in the admission notes enter “99.99” for unknowns.</p>  |
| 28. GBS bacteriuria during this pregnancy                       | <p>GBS bacteriuria refers to THIS pregnancy only. If there is no mention of GBS bacteriuria during this pregnancy, check “No”. If there is notation of a urine culture colony county that indicates an infection, but it does not say if the infection was GBS and whether the woman was treated, check “No”.</p>  | <p>GBS bacteriuria is typically available in the prenatal records. Specifically, this can be found in the prenatal lab results summary (on standard ACOG forms, this is under ‘urine culture/screen’ in the initial lab section of the antenatal history) or the OB history sections; however, this varies depending on whether the mother received prenatal care at a separate location. Sometimes this information has been sent to the hospital, but it is separate from the admission records. Some hospitals have standing order forms for GBS prevention, which have these items on a check list. There might be mention in the discharge summary as well.</p> <p>The magnitude of the colony count may be found in the maternal prenatal records or in the Laboratory Test section.</p>                                     |

|  | Definition   | Special Instructions/Notes   |
|--|--|--|
|  |  | If there is no prenatal information in the maternal labor and delivery chart, as well as no mention of prenatal care in the admission notes check “unknown”.   |
| 29. Previous infant with invasive GBS disease  | This question refers to PREVIOUS births that resulted in invasive GBS disease in the baby. It does NOT ask about a previous GBS pregnancy, where the mother was colonized but the infant did not become ill. | If a mother had an infant from a previous birth and there is no mention of a prior GBS birth (including when the antenatal chart is unavailable), check “No”.<br><br>If there is no prenatal information in the maternal labor and delivery chart, as well as no mention of prenatal care in the admission notes check “unknown”.  |
| 30. Previous pregnancy with GBS colonization   | This question refers to a previous GBS pregnancy where the mother was colonized (GBS +). It is NOT asking about PREVIOUS births that result in invasive GBS disease in the baby.                             | If a mother had a previous pregnancy and there is no mention of GBS colonization (including when the antenatal chart is unavailable), check “No”.<br><br>If there is no prenatal information in the maternal labor and delivery chart, as well as no mention of prenatal care in the admission notes check “unknown”.  |
| 31a. Was maternal group B strep colonization screened for BEFORE admission (in prenatal care)? | Question refers to prenatal tests (tests taken as part of routine prenatal care) BEFORE admission for delivery.  | <b>A negative culture from urine should not be recorded here.</b> (Question 28 is for recording GBS bacteriuria; question 31 is for recording GBS testing and urine is not an acceptable sterile site. Additionally, if there is no mention of a urinary tract infection, assume the culture was either vaginal or rectal.) <b>Ignore any and all pediatric GBS cultures, that is, cultures taken from the infant.</b><br><br>Lab data may be broken down into sections, in which there are sections for 32-36 weeks or 35-37 weeks. Lab sheets may also be in the chart if tests were done in the hospital’s prenatal clinic.<br><br>The test method used to determine GBS colonization may be found in the Laboratory Test section of the chart. GBS test type may be cultures or rapid tests, either PCR or antigen. If a culture test is performed, it usually takes 24-48 hours to obtain results. Try to determine which type of test was performed from a lab slip or the doctor’s notes. The following notations signify a culture was performed: “detected by selective broth culture and DNA probe” or “gen cult GBS+”. If the word “culture” or “cult” is noted, check the “culture” box.<br><br>Record the test result from the prenatal GBS screen.<br><br>If there is no prenatal information in the maternal labor and delivery chart, as well as no mention of prenatal care in the admission notes check “unknown”. |

|   | Definition   | Special Instructions/Notes   |
|---|--|--|
| 31b. If the <i>most recent</i> test was GBS positive, was antimicrobial susceptibility performed? | Question refers to prenatal tests (tests taken as part of routine prenatal care) BEFORE admission for delivery.        | Susceptibility testing for Clindamycin and Erythromycin will usually be found in the lab slip or results section of the medical chart. If either the rapid PCR or rapid antigen testing was performed, susceptibility testing results will most likely be absent.<br><br>If there is no prenatal information in the maternal labor and delivery chart, as well as no mention of prenatal care in the admission notes check “unknown”.  |
| 32a. Was maternal group B strep colonization screened for AFTER admission (before delivery)?      | Question refers to prenatal tests (tests taken as part of routine prenatal care) AFTER admission, but before delivery. | <b>A negative culture from urine should not be recorded here.</b> (Question 28 is for recording GBS bacteriuria; question 32 is for recording GBS testing and urine is not an acceptable sterile site. Additionally, if there is no mention of a urinary tract infection, assume the culture was either vaginal or rectal.) <b>Ignore any and all pediatric GBS cultures, that is, cultures taken from the infant.</b><br><br>The test method used to determine GBS colonization may be found in the Laboratory Test section of the chart. GBS test type may be cultures or rapid tests, either PCR or antigen. Tests on admission are likely to be rapid tests. If a culture test is performed, it usually takes 24-48 hours to obtain results. Try to determine which type of test was performed from a lab slip or the doctor’s notes. The following notations signify a culture was performed: “detected by selective broth culture and DNA probe” or “gen cult GBS+”. If the word “culture” or “cult” is noted, check the “culture” box.<br><br>Record the test result from the GBS screen taken after admission. |
| 32b. If the <i>most recent</i> test was GBS positive, was antimicrobial susceptibility performed? | Question refers to prenatal tests (tests taken as part of routine prenatal care) AFTER admission, but before delivery. | Susceptibility testing for Clindamycin and Erythromycin will usually be found in the lab slip or results section of the medical chart. If either the rapid PCR or rapid antigen testing was performed, susceptibility testing results will most likely be absent.  |
| 33. Were GBS test results available to care givers at the time of delivery?                       | Record whether or not GBS test results were available to health care clinicians at the time of delivery.               | If it cannot be determined, check “Unknown”.   |

**To be filled out by ABCs personnel only**

|          | Definition   | Special Instructions/Notes  |
|----------|--|---|
| Comments | Use this space to add other information that might not have fit the choices provided or to enhance existing information. | Do NOT include any personal identifying information in the comments section. All comments are transmitted to CDC. |

**Table 1: Reference Guide to Neonatal and Obstetric Charts**

| <b>Chart Component</b>                                   | <b>Variables Likely Found</b>  |
|--|--|
| Neonatal Summary Sheet                                   | Date & time of birth; hospital of birth; location of birth; date & time of discharge from hospital; transfer of infant to another hospital following birth; readmission to hospital for sepsis; birth weight; gestational age  |
| Neonatal Discharge Summary                               | Outcome of hospitalization; location of birth; gestational age; clinical syndromes; discharge diagnosis  |
| Neonatal Admitting H&P/Admitting History & Physical (MD) | Date & time of discharge from hospital; gestational age; date of birth (sometimes time)  |
| Maternal Admitting H&P/Admitting History & Physical (MD) | Date of birth; age; penicillin allergy; history of anaphylaxis; blood type   |
| Maternal Discharge Summary                               | Receipt of prenatal care; prenatal tests (results only); ROM date & time; delivery method; IP fever; IP antibiotics (no times or dates); discharge diagnosis; breast milk  |
| Physician Orders   | IP antibiotic orders date & time; tests on admission   |
| Progress Notes (MD)                                      | Useful to scan for a general idea of the chart, includes test results, reason antibiotics were ordered/administered; other relevant history  |
| Nursing Progress Notes                                   | Same as MD progress notes, but more detailed; includes lactation consult & breast milk information   |
| OB Admitting Form  | Receipt of prenatal care; admission date & time; prior GBS baby; prior pregnancy with GBS colonization; GBS bacteriuria; ROM date & time; prenatal test results; tests requested on admission  |
| Prenatal Forms   | Mother's date of birth; number of prenatal visits; dates of first & last prenatal visits; gestational age at last prenatal visit; GBS bacteriuria, prior GBS baby; prior pregnancy with GBS colonization; prenatal tests results, dates, & test types; susceptibility test results |
| Labor Flow/Progress Record                               | IP fever date & time; IAP antibiotics administered; date, time & number of antibiotic doses  |
| Labor & Delivery Summary                                 | Admission date & time; ROM date & time; delivery date & time; delivery method; IV medications including antibiotics; could include IP fever (no time); positive prenatal test results; gestational age; birth weight   |
| Medicine Administration Record (MAR)                     | IAP antibiotics administered; date, time & number of doses   |
| Laboratory & Microbiology Reports                        | Maternal blood type; organism isolated; collection date; culture site; resistance pattern (i.e., SIR/MIC data)   |

\*Locations, names of forms, and test vary by hospital



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