

Congenital Syphilis Case Investigation and Reporting Form Instructions



Department of Health & Human Services

Centers for Disease Control and Prevention National Center for HIV, STD, and TB Prevention Division of STD Prevention Atlanta, Georgia 30333

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Note: These instructions accompany the Congenital Syphilis Case Investigation and Reporting Form, CDC 73.126, REV. 10-2003.

This reporting form is authorized by law (Public Health Service Act, 42 USC 241, OMB Approval No. 0920-0128). Reporting of congenital syphilis cases using this form is required of all sexually transmitted disease (STD) project areas receiving STD grant funds from the Centers for Disease Control and Prevention (CDC).

Introduction

Congenital Syphilis Case Definition

Reported cases of congenital syphilis (CS) before 1989 were defined and classified on the basis of a complex set of clinical and serologic features known as the Kaufman criteria. These criteria were developed to help clinicians evaluate the likelihood that an infant or a child had CS. The need for clinical criteria came from the lack of a widely available "gold standard" test to confirm the diagnosis of CS. Serologic tests for syphilis (STS) alone are not useful for diagnosis. The Kaufman criteria were not designed for use as a **surveillance case definition**.

CDC developed a **surveillance case definition** for CS in 1988. This **surveillance case definition** differs from the clinical diagnosis of congenital syphilis in several important ways. All infants born to mothers who have untreated or inadequately treated syphilis are considered potentially infected. (This criterion is based on the 70%-100% chance that during the first 4 years of infection, an untreated woman will transmit syphilis to her unborn baby.*) Asymptomatic infants and stillbirths are included in the case definition. The **surveillance case definition** makes case classification simpler. This makes comparisons across states and regions more reliable. Longitudinal follow-up is not required to determine the appropriate case classification thus reporting can occur in the immediate post-delivery period.

Another important feature of the **surveillance case definition** is its emphasis on the mother's history of diagnosis, treatment, and follow-up. The cases defined by this **surveillance case definition** will give program planners information on how to improve the STD prevention and prenatal care systems to identify and treat pregnant women who have syphilis. Having CS surveillance data available to program planners and managers will improve our ability to reach high risk women and treat their syphilis infections early in pregnancy. The increased sensitivity of the surveillance case definition will classify a few infants as cases who are not infected with syphilis; this reflects the limitations of current diagnostic tests. However, inclusion of these infants in the surveillance system will not be detrimental because the goal of this surveillance system is to identify problems in the prevention of CS rather than to make highly accurate counts of infected infants.

^{*}Thomas EW. Syphilis. New York: MacMillan Co., 1949

The Congenital Syphilis Case Investigation and Reporting Form

This form (CDC 73.126 REV. 10-2003) should be used by health officials who are responsible for identifying the infants or children of recently pregnant women who may be infected with <u>Treponema pallidum</u>. The accompanying algorithm (found on the back of the reporting form) should be used to determine whether an infant or a child meets the CDC surveillance case definition of CS. The surveillance case definition (appendix) should be used to classify cases into one of the following three surveillance categories: confirmed, presumptive, or syphilitic stillbirth.

Finding the Data on Cases of Congenital Syphilis

The information needed to determine whether an infant or a child meets the criteria for the CDC/Council for State and Territorial Epidemiology (CSTE) surveillance case definition of CS may be found in a variety of places:

- The mother's syphilis reactor file
- The mother's hospital record
- The infant's or child's hospital record
- The infant's or child's birth certificate or death certificate

No single record is likely to contain all the information needed; therefore, information should be obtained from several sources. For example, the following steps may be taken to evaluate a report of a reactive STS obtained at delivery:

- Check the STD program's reactor file to determine whether the mother had evidence of untreated or inadequately treated syphilis before delivery.
- Review the mother's hospital and prenatal records for demographic information, prenatal care information, findings at delivery (e.g., genital lesions, abnormal placenta, or stillborn infant), and serologic test results.
- Review the infant's or child's medical record for physical examination findings, radiographic, serologic, cerebrospinal fluid (CSF), other test results, and treatment information.

If an STS on the mother or infant at delivery is not routinely performed in hospitals, identifying cases that meet the surveillance definition of CS will be more difficult.* Case detection can be augmented by:

- Asking all women who are treated for syphilis whether they have been pregnant during the last 12 months and asking about the outcome of the pregnancy.
- Comparing fetal death records with the reactor file on a routine basis to identify possible syphilitic stillbirths.

Health officials responsible for investigating cases of CS should establish working relationships with hospitals having obstetrical services, prenatal clinics, and other providers of health care to pregnant women and infants to ensure access to all of these records.

Data for case classification should be available at the time of delivery. Sequential infant titers are not required for determining whether an infant or a stillborn meets the surveillance case definition of CS. The results of sequential infant titers do not have any bearing on the case classification process for surveillance purposes.

Detecting cases of CS is an active process. Someone in the STD prevention program should be trained to collect the data necessary for completing this form. In areas where numerous case investigations take place, it may be beneficial to request the assistance of the hospital's infection control nurse, obstetricians, midwives, or pediatricians to provide some of the information needed to complete the case investigation.

Some data required on the reporting form may not be found on the aforementioned records. Names of cities, counties, states, and countries should be entered on the reporting form as numeric codes called FIPS (Federal Information Processing Standards) codes. For details on ordering the complete Worldwide Geographic Location Codes, call (202) 219-0077 or search for "Geographic codes" box on website WWW.GSA.GOV. FIPS codes should be available for all health care workers responsible for completing these forms. To order copies of the Congenital Syphilis Case Investigation and Reporting Form (CDC 73.126) and/or Instruction booklets contact the Statistics and Data Management Branch, Division of STD Prevention, NCHSTP, CDC, (404) 639-8356.

^{*}In high syphilis incidence areas, obtaining a STS on every mother or infant at delivery is an important case detection strategy. If this policy is not in place STD prevention programs should work closely with delivery hospitals to help implement this policy.

Quality Assurance

Read the instructions, the footnotes, and the algorithm carefully before attempting to complete this form. Before these forms are sent by the local reporting areas to the state health department or state STD program, they should be checked for completeness and accuracy by someone familiar with the revised 73.126 form and instructions. Errors and omissions should be corrected before the form is sent to the state. Similarly, the state STD program should assign someone the responsibility for checking forms for completeness and accuracy before sending the form to CDC. Reporting areas with errors or omissions will be contacted for correct information. The second (blue) sheet of the triplicate form should be sent to CDC. Photocopies must have a unique ID and should not include the top portion (personal identifiers) of the form.

Completed forms may be sent in batches to CDC monthly. Preferably, individual reports should be sent as soon as possible after the case has been reported to the health department. Morbidity is counted based on the infant's birth date and the mother's residence. Health departments will be given sufficient advance notice of year-end close-out dates.

Electronic Reporting of Cases

Many states are capable of transmitting the information on the reporting form to CDC electronically through the National Electronic Telecommunications System for Surveillance (NETSS). The reporting form has been designed to be compatible with NETSS to facilitate this method of reporting. Specific instructions for reporting all STD data, including CS data, through NETSS is available through the Statistics and Data Management Branch, (404) 639-8356.

Updating Information on a Case Already Reported to CDC

To avoid the possibility of duplicate reporting, do not complete a new form to update information on a case that has already been reported to CDC. Similarly, do not send a photocopy of the original form. Call the Statistics and Data Management Branch (404) 639-8356 regarding any corrections to be made. Methods for updating or correcting cases sent electronically via NETSS will be provided in the NETSS instructions.

Obtaining Training and In-Service Materials

To accurately carry out a case investigation and complete the case investigation and reporting form requires some epidemiologic and clinical knowledge of CS. The following is a list of recent CDC publications that describe CS, it's diagnosis, and treatment. These publications can be ordered by calling the Information Service's Office, NCHSTP/OD, at (404) 639-8063.

Publications

- 1. Centers for Disease Control and Prevention. Congenital syphilis United States, 2000. Morbidity and Mortality Weekly Report 2001; 50:573-7.
- 2. Centers for Disease Control and Prevention. Evaluation of Congenital Syphilis Surveillance System, New Jersey, 1993. Morbidity and Mortality Weekly Report 1995; 44:225-227.
- 3. Centers for Disease Control and Prevention. Primary and secondary syphilis United States, 1998. *Morbidity and Mortality Weekly Report* 1999; 48:873-878.
- 4. Finelli L, Crayne EM, Spitalny KC. Treatment of infants with reactive syphilis serology, New Jersey: 1992-1996. *Pediatrics* 1998; 102:1-6.
- 5. Centers for Disease Control and Prevention. Epidemic of congenital syphilis Baltimore, 1996-1997. *Morbidity and Mortality Weekly Report* 1998; 42:904-907.
- 6. Sanchez PJ. Laboratory tests for congenital syphilis. *Pediatric Infectious Disease Journal* 1998; 17(1):70-71.
- 7. Stoll BJ. Congenital syphilis: evaluation and management of neonates born to mothers with reactive serologic tests for syphilis. *Pediatric Infectious Disease Journal* 1994;13(10):845-852.
- 8. Mascola L, et al. Inadequate treatment of syphilis in pregnancy. *Am J Obstet Gynecol* 150:945-47, 1984.
- 9. Ehling LR. Control and prevention of congenital syphilis. Border Health 5(2):11-13, 1989.
- 10. Zenker P, Berman S. Congenital syphilis: reporting and reality. Am J Public Health 80:271-72, 1990.
- 11. Cohen DA, et al. The effects of case definition, maternal screening, and reporting criteria on rates of congenital syphilis. *Am J Public Health* 80:316-17, 1990.
- 12. Dunn RA, Webster LA, Nakashima AK, Sylvester GC. Surveillance for Geographic and Secular Trends in Congenital Syphilis United States, 1983-1991, *MMWR* Vol 42, No.55-56.
- 13. CDC. Guidelines for prevention and control of congenital syphilis. MMWR 1988; 37(No. S-1).
- 14. Thompson B, et al. Congenital Syphilis in Maryland: 1986-1991: The Effect of Changing the Case Definition and Opportunities for Prevention. *Sexually Transmitted Disease* 22(6):364-369, 1995.
- 15. Coles BF, Hipp SS, Silberstein GS, Chen JH. Congenital syphilis surveillance in upstate New York, 1989-1992: implications for prevention and clinical management. *J Infect Dis* 1995;171:732-5.
- 16. Risser WL, Hwang LY. Problems in the current case definitions of congenital syphilis. *J Pediatr* 1996; 129:499-505.
- 17. CDC. Sexually transmitted disease surveillance, 2001. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, September 2002.
- 18. CDC. Syphilis Surveillance Supplement, 2001. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, February 2003.
- 19. CDC. Sexually transmitted diseases treatment guidelines, 2002. MMWR 2002;51(RR-6): 1-80.

- 20. Gust DA, Levine WC, St Louis ME, Braxton J, Berman SM. Mortality associated with congenital syphilis in the United States, 1992-1998. *Pediatrics* 2002;109:E79-9.
- 21. Martin D, Bertrand J, McKegney C, Thompson L, Belongia E, Mills W. Congenital syphilis surveillance and newborn evaluation in a low-incidence state. Arch Pediatr Adolesc Med 2001;155:140-4.

General Instructions

- 1. Use a pencil or ballpoint pen to complete forms. Avoid felt tip markers since they result in poor copies.
- 2. Avoid stacking forms when writing on them; this results in extraneous marks on copies making them illegible.
- 3. Fill in one digit per dashed line.
- 4. Mark only one box per question.
- 5. Boxes should preferably be marked with an X.
- 6. Dates should be written in MM/DD/YYYY format. Months and days less than 10 should be preceded with a 0, for example, May should be recorded as 05. If the day is not known, record the known month and year values and record the day as 15. If the entire date is unknown, mark the *unknown* box with an X.
- 7. On all questions, unknowns should be marked with an X in the *unknown* box.
- 8. Do not write in more dates than there are places to write in dates. These dates will be disregarded at CDC.
- 9. Do not write additional information in the margins or spaces. This information will be disregarded at CDC. For example, if a test result is pending, indicate that the result is unknown. Do not write *pending* in the margin.
- 10. Skip patterns are directions that appear in bold italic print next to some answers (**Go to Q**...) and direct you to the next question to be answered. Observe these directions and do not complete a question that you have been directed to skip. Data entered where an item should have been skipped will be disregarded at CDC.
- 11. Except for skip patterns and where specifically mentioned in these instructions, all questions must be completed. Reporting areas with missing data will be contacted for correct information.
- 12. Footnotes mentioned in these instructions and on the reporting form are located on the back of each form.

Reporting Form Items

Case ID No.: The case identification number is a red preprinted number assigned to each case by CDC.

Local Use ID No.: The local use identification number is an identification number assigned to the case by the local or state health department for internal use. Completion of this item is optional.

Part I. Maternal Information

- 1. Report Date to Health Dept.: This is the date when the first information about the infant or child came to the attention of the health department or STD program. This answer should never be blank. If the date is not known, mark the *unknown* box. The report date should never be before the infant's delivery date.
- 2,3,4. Reporting State FIPS code, Reporting County FIPS code, Reporting City FIPS code. Federal Information Processing Standards (FIPS) codes are assigned for each state, county, and city in the United States. State FIPS codes are 2-digit numbers, county FIPS codes are 3-digit numbers, and city FIPS codes are 4-digit numbers. Every locality has all three FIPS codes with one exception: U. S. territories do not have assigned county FIPS codes. For the purposes of completing this form, U. S. territories should use county FIPS code 001 and write *no county* next to this code. Independent cities not considered in a county, such as Richmond, Virginia, do have a county FIPS code designation. Richmond, Virginia should be coded as follows: State: 51 Virginia, County: 760 Richmond, City: 2060 Richmond. The full name of the state, county, and city should be written on the line next to each FIPS code. (See the Background section for instructions on how to obtain FIPS code listings.)

The reporting state, county, and city are where the case report originates. This information should never be marked *unknown*. A case may be investigated in one locality but reported by another. In most instances, the patient's residence is chosen as the reporting locality: however, no guide lines exist for designating the reporting locality. To optimize national reporting, each area should have a consistent procedure for avoiding reports from both places.

- 5. Other geographic unit: The geographic unit is an optional code such as a census tract identifier or the last three digits of the zip code which would be useful to the health department. Leave this answer blank if there is no geographic unit.
- 6. Country of residence: This code should correspond to the country of residence of the mother. It should be left blank if the mother's residence is in the US. For foreign countries of residence, enter the 2-digit country code (i.e., CH for China, MX for Mexico, RS for Russia). For other country codes, contact the SDMB in the Division of STD Prevention at (404) 639-8356.
- 7,8,9. FIPS code for residence Country, State, County and City. These codes should correspond to the country, state, county, and city of residence of the mother. Residence FIPS codes may be different from the FIPS codes of the reporting health department. (See instructions for completing the reporting FIPS codes.)
 - 10. Zip code: Write the zip code of mother's residence. If the zip code is not known, mark the *unknown* box.
 - 11. Mother's date of birth: Write the mother's date of birth. If this date is not known, mark the *unknown* box.
 - 12. Mother's ethnicity: Mark the appropriate box to denote the mother's ethnicity (Hispanic/Latino or Non-Hispanic/Latino). Do not leave this answer blank. If mother's ethnicity is not known, mark the *unknown* box.

- 13. Mother's race: Mark all that apply to denote the mother's race. If the mother's race is not known, mark the *unknown* box.
- 14. Mother's marital status: Mark the appropriate box to show the mother's current marital status. Do not leave this answer blank. If the marital status is not known, mark the *unknown* box.
- 15. Last menstrual period (LMP) (before delivery): Show the date of onset of the last menstrual period before delivery. Do not leave this answer blank. If the LMP is not known, mark the *unknown* box. If the day is not known, record the known month and year values and record the day as 15.
- 16. Did mother have prenatal care?: Mark the appropriate box to show whether the mother had at least one prenatal care visit before delivery. A prenatal care visit does not include medical care for reasons unrelated to prenatal services, such as visits to an emergency room, a minor emergency clinic, or an STD clinic. This question does not ask for an assessment of the quality of prenatal care. If the answer is no or unknown, proceed to question 19; do not complete questions 17 or 18.
- 17. Date of first prenatal visit: If the answer to question 16 is yes, show the date of the first prenatal visit; do not leave this answer blank. If the day is unknown, write 15 in the corresponding blank. If the entire date is unknown, mark the *unknown* box. Do not answer this question if the answer to question 16 is *no* or *unknown*.
- 18. Number of prenatal visits: If the answer to question 16 is yes, show the number of prenatal visits before delivery; do not leave this answer blank. If the number of visits is not known, mark the *unknown* box. Do not answer this question if the answer to question 16 is *no or unknown*.
- 19. Maternal nontreponemal test: Mark the appropriate box to show whether mother had an RPR/VDRL in pregnancy, at delivery, or soon after delivery. Do not leave this answer blank. If the answer is *no or unknown*, proceed to question 21; do not complete question 20.
- 20. Dates and results of maternal nontreponemal tests: This question must be completed if the answer to question 19 is *yes*. Space is provided for the four tests done closest to *the time of diagnosis of the infant or child*. (In most cases this will be near the date of delivery but could be earlier or later). List the date closest to the time of diagnosis of the infant or child at a. and go *backward* in time. All four lines do not need to be completed. Fill in dates as previously instructed. Mark the appropriate box to show the results of each nontreponemal test. Fill in titers (if reactive) in spaces provided beginning *immediately to the right of the colon*. For example, a titer of 1:8 is recorded 1:8___. Do *not* fill in the remaining spaces. Rewriting a 1: is not necessary. If the titer is unknown, record the titer as 9999.

NOTE: Every date entered in question 20 must have a result box marked. Do not complete this section if the answer to question 19 is no or unknown.

21. Maternal confirmatory treponemal test: (See footnote a for further explanation of this question). Mark the appropriate box to show whether the mother had a TP-PA or FTA-ABS test and whether the test was reactive or nonreactive. If the result of the treponemal test is not known or it is not known whether a treponemal test was done, mark the *unknown* box.

- 22. Darkfield/DFA examination at delivery: (See footnote a for further explanation of this question). Mark the appropriate box if the mother had a darkfield or direct fluorescent antibody (DFA) examination of a lesion or lesions at the time of delivery and show whether results were positive or negative. If the results of the darkfield or DFA examination are not known or it is not known whether a darkfield or DFA examination was done at the time of delivery, mark the *unknown* box.
- 23. Mother's last treatment for syphilis **before** delivery: Mark one appropriate box to show when the mother was **last** treated for syphilis before the date of delivery and indicate the date of treatment in the space provided. For example, if the mother was treated for syphilis before this pregnancy and was treated again during pregnancy, then the last treatment was *during pregnancy*. Follow the skip patterns: If the mother was last treated before pregnancy, proceed to question 24. If the mother was treated during pregnancy, proceed to question 27. If the date of the mother's last treatment is not known, mark the *unknown* box, leave the date of treatment blank, then proceed to question 27.

NOTE: Instances may arise where the mother was treated adequately for syphilis but was given additional treatment later as a "preventive measure" without evidence that she had been exposed to syphilis or had a new or recurrent syphilis infection. If this later treatment would be considered inadequate because it was a non-penicillin therapy or was too close to the time of delivery, do not record this treatment as the last treatment in pregnancy. Consider the earlier adequate treatment as the last treatment for syphilis before the date of delivery.

- 24. Mother's last treatment was **before** pregnancy: (See footnote b for the definition of adequate treatment before pregnancy). Mark one appropriate box to denote the adequacy of treatment before pregnancy. If the answer is "Yes, adequate," proceed to question 26; do not answer question 25. If the answer is "No, inadequate" or "Unknown," proceed to question 27; do not answer questions 25 or 26. This question must be answered if the answer to question 23 is 1. Do not answer this question if the answer to question 23 was 2, 3, or 9.
- 25. Mother's last treatment was **during** pregnancy: (See footnote b for the definition of adequate treatment during pregnancy). Mark one appropriate box to denote the adequacy of treatment during pregnancy. If the answer is "Yes, adequate," proceed to question 26. If the answer is "No, inadequate" or "Unknown," proceed to question 27; do not answer question 26. This question must be answered if the answer to question 23 is 2. Do not answer this question if the answer to question 23 was 1, 3, or 9.
- 26. Appropriate serologic response: (See footnote c for the definition of appropriate serologic response). Mark one appropriate box to show whether the serologic response was appropriate with or appropriate without adequate serologic follow-up during pregnancy, inappropriate, or equivocal/could not be determined. This question must be answered if the response to question 24 or 25 was "Yes, adequate." Do not answer this question if the answer to question 23 is "No treatment" or "Unknown" or the answer to question 24 or 25 is "No, inadequate" or "Unknown."

Part II. Infant Information

27. Date of delivery: Write the date of delivery of the infant or child (infant's or child's birthdate). Do not leave this answer blank.

- 28. Vital status: Show the vital status of the infant or child at the time of this case report and investigation. Do not leave this answer blank. If the infant or child is alive, proceed to question 30. If the infant or child was born alive then died, proceed to question 29. If the infant was stillborn (see footnote d for definition of a stillbirth), proceed to question 31. If the vital status is not known, proceed to question 30.
- 29. Date of death: Complete this question *only* if the infant or child died after birth. If the date of death is not known, mark the *unknown* box. Do not complete this question if the infant was stillborn.
- 30. Gender: Denote the gender of the infant or child. Do not leave this answer blank *unless* the infant was stillborn. Leave blank if the infant was stillborn.
- 31. Birth weight: Write the birth weight in *grams*, not pounds and ounces or kilograms. Do not use decimal points. Write a 0 in the first space if the infant weighed less than 1000 grams. For example, a birth weight of 750 grams should be written as 0 7 5 0. If the hospital recorded the weight in pounds and ounces, convert the weight to grams using the formula: 1 pound = 454 grams, 1 ounce = 28 grams. For example, a birth weight of 6 pounds, 11 ounces = 3,032 grams. If the weight is listed in kilograms, multiply kilograms x 1000 = grams. For example, 2.5 kilograms = 2500 grams. Do not leave this answer blank. If the answer is not known, mark the *unknown* box.
- 32. Estimated gestational age (EGA): Show the gestational age in *weeks*. If a fraction of a week is also recorded, round the gestational age to the nearest whole number. For example, 40 2/7 weeks should be recorded as 40. Gestational age is usually available in the delivery record or can be calculated from the maternal due date. The Dubowitz exam (done by hospital staff) or sonogram results are acceptable if the LMP or the due date is not recorded. If the infant is called term without a specified number of weeks, LMP, or due date, then show the estimated gestational age as 40. Do not leave this answer blank. If the gestational age is not known, mark the *unknown* box.

NOTE: If the infant was stillborn, proceed to Question 42. Do not answer questions 33-41.

- 33. Infant/child reactive non-treponemal test for syphilis (e.g., RPR, USR, TRUST, VDRL): Mark the appropriate box to show whether the infant or child has had *any* reactive non-treponemal tests for syphilis at any time. Cord blood tests are included as infant serologic tests for syphilis. Do not leave this answer blank (unless the infant was stillborn). If the answer to this question is *no or unknown*, proceed to question 34. If the answer to this question is *yes*, fill in *the date* and the *titer* of the infant/child's first reactive non-treponemal test for syphilis. For *titer*, fill in the spaces beginning immediately to the right of the colon. For example, a titer of 1:8 is recorded 1:8____. Do not fill in the remaining spaces with 9s or 0s. Rewriting a 1: is not necessary. If the titer is unknown leave this section blank.
- 34. Infant/child reactive treponemal test for syphilis (e.g., FTA-ABS and TP-PA): Mark the appropriate box to show whether the infant or child has had *any* reactive treponemal tests for syphilis at any time. Cord blood tests are included as infant serologic tests for syphilis. Do not leave this answer blank (unless the infant was stillborn). If the answer to this question is *no or unknown*, proceed to question 35. If the answer to this question is *yes*, fill in *the date* of the infant/child's first reactive treponemal test for syphilis.
- 35. Infant/child has classic signs of CS: (See footnote e for examples of classic signs of CS). Mark the appropriate box to show whether the infant or child had any classic signs of CS.

Do not leave this answer blank (unless the infant was stillborn). If the presence of classic signs is not known, mark the *unknown* box.

- 36. Infant/child had darkfield examination or DFA-TP: Mark the appropriate box to show whether a darkfield examination or DFA-TP was done and the result. *Please note: The DFA-TP is not the FTA-ABS. A DFA test is performed on lesion material using a fluorescent stain for <u>T. pallidum</u>; it is not a serologic test. Do not leave this answer blank (unless the infant was stillborn). If the result of the darkfield or DFA-TP examination is not known or it is not known whether a darkfield or DFA-TP examination was done, mark the unknown box.*
- 37. Infant/child had IgM-specific treponemal test: *Please note: This test is not the FTA-ABS or TP-PA (see footnote f for a discussion of IgM-specific treponemal tests)*. Mark the appropriate box to show whether an IgM-specific treponemal test was done and the result. Do not leave this answer blank (unless the infant was stillborn). If the result of the IgM-specific treponemal test is not known or it is not known whether an IgM-specific treponemal test was done, mark the *unknown* box.
- 38. Infant/child had long bone X-rays: Mark the appropriate box to show whether long bone X-rays were done and the results. Evidence of osteochondritis or periostitis is consistent with CS. Do not leave this answer blank (unless the infant was stillborn). If the results of the long bone X-rays are not known or it is not known whether long bone X-rays were done, mark the *unknown* box.
- 39. Infant/child had CSF-VDRL: Mark the appropriate box to show whether a CSF-VDRL was done and the results. Do not leave this answer blank (unless the infant was stillborn). If the result of the CSF-VDRL is not known or it is not known whether a CSF-VDRL was done, mark the *unknown* box.
- 40. Infant/child had CSF cell count or CSF protein: (See footnote g for a discussion of normal and abnormal CSF cell count and protein). Mark the appropriate box to show whether the CSF cell count and protein were done and the results. Note that results are recorded as elevated or not elevated. Do not leave this answer blank (unless the infant was stillborn). If the results of the CSF cell count and protein are not known or it is not known whether the CSF cell count and protein were done, mark the *unknown* box.
- 41. Infant/child treatment: Mark the appropriate box to show whether treatment was given and what was administered. Mark box 1 if aqueous or procaine penicillin or some combination of the two was administered at the recommended dose¹ for 10 or more days. Mark box 2 if the infant or child was initially treated with ampicillin (usually in combination with an aminoglycoside or cephalosporin for broad spectrum coverage) and then was switched to either aqueous or procaine penicillin or a combination to complete at least 10 days of therapy. Mark box 3 if the infant or child was treated once with benzathine penicillin G, 50,000 units/kg IM. Mark box 4 if a treatment other than the treatments designated in boxes 1, 2, or 3 was given; for example, 10 days of ampicillin or ceftriaxone, or other than the recommended dose or duration of penicillin. Mark box 5 if the infant or child did not receive therapy. Mark box 9 if the type or the duration of treatment is not known or if it is not known whether treatment was given at all.

¹Aqueous penicillin G, 50,000 units/kg IV every 8-12 hours; procaine penicillin, 50,000 units/kg IM daily.

Part III. Congenital Syphilis Case Classification

42. Classification: For assistance in making a case classification, see the surveillance case definition (appendix) and the algorithm (decision tree) on the back of the third copy of the Case Investigation and Reporting Form. Mark the appropriate box to show the classification: not a case, a confirmed case, a syphilitic stillbirth, or a presumptive case. Do not leave this answer blank.

Appendix

Surveillance Case Definition for Congenital Syphilis

A **confirmed case** of congenital syphilis is an infant or child in whom **Treponema pallidum** is identified by darkfield microscopy, direct fluorescent antibody, or other specific stains in specimens from lesions, placenta, umbilical cord, or autopsy material.

A **presumptive case** of congenital syphilis is either of the following:

- A. any infant whose mother had untreated or inadequately treated¹ syphilis at the time of delivery, regardless of the findings in the infant or child;
- B. any infant or child who has a reactive treponemal test for syphilis and any one of the following:
 - 1. evidence of congenital syphilis on physical examination²;
 - 2. evidence of congenital syphilis on long bone X-ray;
 - 3. reactive cerebrospinal fluid CSF-VDRL;
 - 4. elevated CSF cell count or protein (without other cause)³;
 - 5. reactive test for IgM antibody⁴.

A **syphilitic stillbirth** is defined as a fetal death in which the mother had untreated or inadequately treated syphilis at the time of delivery of a fetus after a 20-week gestation or of a fetus weighing >500g.

¹Inadequate treatment consists of any non-penicillin therapy or penicillin given less than 30 days before delivery.

²Signs of CS in an infant or a child younger than 2 years of age may include condyloma lata, snuffles, syphilitic skin rash, hepatosplenomegaly, jaundice due to syphilitic hepatitis, pseudoparalysis, or edema from nephrotic syndrome or malnutrition. Stigmata in an older child may include interstitial keratitis, nerve deafness, anterior bowing of shins, frontal bossing, mulberry molars, Hutchinson's teeth, saddle nose, rhagades or Clutton's joints.

 $^{^{3}}$ In the immediate newborn period, interpretation of these tests may be difficult; normal values differ with gestational age and are higher in preterm infants. CSF cell count and protein in a neonate should be interpreted by a clinician. Beyond the neonatal period, a CSF count >5 wbc/mm³ or CSF protein >40 mg/dl is abnormal.

⁴A treponemal test that detects a specific subunit of antitreponemal IgM. This test is not yet widely available and should not be confused with FTA-ABS.