Revisions to the Syphilis Surveillance Case Definitions, 2018: Changes Related to Reporting Syphilis Stages

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Outline for Today’s Webinar

- Background and overview of revisions for 2018
- Detailed review of revised case definitions by stage
- Clinical scenarios
- Question and answer period (by text window)
Next Webinar on November 7th

- Tuesday, November 7, 2017 at 2 pm Eastern
- Review of clinical manifestations of syphilis with Dr. Kim Workowski
  - Focus on neuro, ocular, and otic syphilis
- Review of neurologic manifestations variable
- Review of new clinical manifestations variables (ocular, otic, and late manifestations)
Background and Overview of Revisions for 2018
Surveillance Case Definitions – General Process

- Council of State and Territorial Epidemiologists (CSTE) recommends that state health departments report cases of selected diseases to CDC

- Case definitions periodically revised using CSTE’s Position Statements

- Position Statements are
  - Submitted to CSTE sub-committees in Spring
  - Discussed and voted on at CSTE meeting in June
  - If approved, go into effect the following year
Syphilis Case Definition Revisions for 2018: Timeline

- Fall 2016 – Feb 2017: Discussions with and feedback from CSTE STD Surveillance Coordinators, CSTE STD Subcommittee, other stakeholders
- March 2017: Proposed Position Statement submitted to CSTE
- June 2017: Position Statement voted on and approved at CSTE meeting
- January 2018: New definitions go into effect
Recent History of Syphilis Case Definition Revisions

- Jan 2014 Revisions (revising the 1996 case definitions):
  - Physician diagnosis/staging no longer sufficient
  - “Secondary Syphilis” requires a reactive treponemal test in addition to previous requirement of nontreponemal titer ≥1:4
  - “Syphilis, latency of unknown duration” omitted
  - Additional criteria added as sufficient evidence of infection within the past 12 months, to allow more latent cases to be classified as “Early Latent Syphilis”

- Jan 2015: Revisions to Congenital Syphilis case definitions
Current (2014–2017) Syphilis Case Reporting

- Must report a case as one of the following surveillance stages
  - Primary
  - Secondary
  - Early Latent
  - Late Latent
  - Late with Clinical Manifestations

- Additional variable for all cases: “Neurologic involvement?”
  - Refers to Neurosyphilis case definition
  - Answered as “Yes, confirmed,” “Yes, probable,” “No,” or “Unknown”
Why Make Revisions?

- **Inability to track Ocular Syphilis and other important clinical manifestations**

- Inconsistencies in the current (2014) guidance for reporting “Neurologic Involvement” (Neurosyphilis)
Syphilis Surveillance Case Definition Revisions 2018

- Revisions related to reporting surveillance stages

- Revisions related to reporting clinical manifestations
  - New clinical manifestations variables
New Clinical Manifestation Variables in 2018

▪ Any case can be reported with one or more of the following
  – Neurologic Manifestations (verified/likely/possible/no/unknown)
  – Ocular Manifestations (verified/likely/possible/no/unknown)
  – Otic Manifestations (verified/likely/possible/no/unknown)
  – Late Clinical Manifestations (verified/likely/no/unknown)

▪ Definitions/guidance in the Position Statement

▪ To be discussed in depth on next webinar (Nov. 7th)
Syphilis Case Definition Revisions for 2018: Stages

- “Secondary Syphilis” still requires BOTH reactive treponemal test AND reactive nontreponemal test, but no longer requires a titer ≥1:4

- Nomenclature changes to remove “latent” from surveillance stages
  - “Early Latent Syphilis” → “Early Non-Primary, Non-Secondary Syphilis”
  - “Late Latent Syphilis” → “Unknown Duration or Late Syphilis”

- “Late Syphilis with Clinical Manifestations” omitted
  - Report these cases as “Unknown Duration or Late Syphilis”
  - Report the late clinical manifestations in the case report data with the new variables
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Review of Syphilis Stage Definitions
Primary Syphilis: Clinical Description

- A stage of infection with *Treponema pallidum* characterized by one or more ulcerative lesions (e.g., chancre), which might differ considerably in clinical appearance
Primary Syphilis: Case Classification

- **Probable:**
  - A case that meets the clinical description of primary syphilis with a reactive serologic test

- **Confirmed:**
  - A case that meets the clinical description of primary syphilis with demonstration of *T. pallidum* in a clinical specimen by darkfield microscopy or by PCR or equivalent direct molecular methods
Secondary Syphilis: Clinical Description

- A stage of infection with *Treponema pallidum* characterized by localized or diffuse mucocutaneous lesions (e.g., rash), often with generalized lymphadenopathy. Other signs can include mucous patches, condyloma lata, and alopecia. The primary ulcerative lesion may still be present.
Secondary Syphilis: Case Classification

- **Probable:**
  - A case that meets the clinical description of secondary syphilis with a reactive nontreponemal test AND a reactive treponemal test

- **Confirmed:**
  - A case that meets the clinical description of secondary syphilis with demonstration of *T. pallidum* in a clinical specimen by darkfield microscopy or by PCR or equivalent direct molecular methods
Early Non-Primary, Non-Secondary Syphilis: Clinical Description

- A stage of infection with *Treponema pallidum* in which initial infection has occurred within the previous 12 months, but there are no signs or symptoms of primary or secondary syphilis
Early Non-Primary, Non-Secondary Syphilis: Clinical Description

- A stage of infection with Treponema pallidum in which initial infection has occurred within the previous 12 months, but there are no signs or symptoms of primary or secondary syphilis*

*From CDC’s 2003 Recommendations on Public Health Surveillance of Syphilis in the U.S.:
“Syphilis cases should be categorized and reported by stage at the time of initial examination (which is often the time of initial specimen collection), not at the time of treatment or interview.”
Early Non-Primary, Non-Secondary Syphilis: Case Classification (Paraphrased)

**Probable:**
- A case with
  1. No signs/symptoms of primary or secondary syphilis AND
  2. Evidence of current infection*
  3. Evidence of having acquired infection within last 12 months (see next slide)

*Evidence of current infection:
- No prior history of syphilis AND current reactive nontreponemal test AND current reactive treponemal test
- A prior history of syphilis with a current nontreponemal titer demonstrating a ≥4-fold increase from the last titer, unless there is evidence that this increase was not sustained >2 weeks
Evidence of Having Acquired Infection within Last 12 Months:

- Documented seroconversion of nontreponemal or treponemal test in last 12 months
- ≥4-fold increase in nontreponemal titer within last 12 months (unless increase is not sustained)
- History of symptoms of primary or secondary syphilis within last 12 months
- History of sex partner with primary, secondary, or early non-primary non-secondary syphilis within last 12 months
- Sexual debut within last 12 months
A stage of infection with *Treponema pallidum* in which initial infection has occurred >12 months previously OR in which there is insufficient evidence to conclude that infection was acquired during the previous 12 months.
Unknown Duration or Late Syphilis: Case Classification (Paraphrased)

- **Probable:**
  - A case with
    1. No signs/symptoms of primary or secondary syphilis
    2. Evidence of current infection*
    3. No evidence of having acquired infection within last 12 months

*Evidence of current infection:
- No prior history of syphilis AND current reactive nontreponemal test AND current reactive treponemal test
  - OR
- A prior history of syphilis with a current nontreponemal titer demonstrating a ≥4-fold increase from the last titer, unless there is evidence that this increase was not sustained >2 weeks
  - OR
- Clinical signs/symptoms/labs that meet the likely or verified criteria for neurologic, ocular, otic, or late clinical manifestations
Clinical Scenarios
Case #1

- 33 yo male

- Penile lesion 6 weeks ago that resolved; now has fever to 101, malaise, full body rash, including on palms of hands/soles of feet

- RPR 1:64, TPPA Reactive
How Would You Stage This Patient?

- Primary
- Secondary
- Early, non-primary, non-secondary
- Unknown duration or late syphilis
- Not a case
Case #2

- 22 yo male, MSM
- Had anal ulcer 3 months ago, was getting work-up by GI
- Reports mild rash on back/abdomen 1 month ago, didn’t seek care
- Now presents to STD clinic for “routine check-up”, asymptomatic
- RPR 1:16, TPPA Reactive
- Had a negative RPR 9 months ago
How Would You Stage This Patient?

- Primary
- Secondary
- Early, non-primary, non-secondary
- Unknown duration or late syphilis
- Not a case
Case #3

- 22 yo male, MSM
- Now presents to STD clinic for “routine check-up”, asymptomatic
- RPR 1:16, TPPA Reactive
- Had a negative RPR 13 months ago
How Would You Stage This Patient?

- Primary
- Secondary
- Early, non-primary, non-secondary
- Unknown duration or late syphilis
- Not a case
Case #4

- 28 yo female, sex worker
- Presents to ED with complaints of blurry vision, dizziness for past week.
- Denies genital ulcers, rashes.
- Gets regular STD testing, never had syphilis in the past, last test was 18 months ago
- The patient was treated for ocular syphilis with IV penicillin
- RPR 1:64, TPPA reactive; CSF VDRL reactive
How Would You Stage This Patient?

- Primary
- Secondary
- Early, non-primary, non-secondary
- Unknown duration or late syphilis
- Not a case
Case #5

- 29 yo male presents for regular HIV check-up
- Provider orders routine tests including RPR
- RPR 1:32, TPPA reactive
- Previous RPR 1:2 six months ago; physician diagnoses patient as early latent

- DIS interviews patient a couple weeks later and the patient shows her a fading rash on the palms of his hands
How Would You Stage This Patient?

- Primary
- Secondary
- Early, non-primary, non-secondary
- Unknown duration or late syphilis
- Not a case
Case #6

- 48 yo male with past history of syphilis
- Routine screening, RPR 1:64
- Previous RPR 1:8 12 months ago (baseline)
- Called back to clinic and is retested, RPR 1:16
- Reports no symptoms and no new partners
How Would You Stage This Patient?

- Primary
- Secondary
- Early, non-primary, non-secondary
- Unknown duration or late syphilis
- Not a case
Questions and Answers
Resources

- CSTE Position Statement

- Second webinar on syphilis clinical manifestations
  - Tuesday November 7, 2017, 2:00 PM EST

- Syphilis case definition and implementation breakout session
  - NCSD Meeting, Alexandria, VA
  - November 14-17, 2017
The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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