STD PCHD

Strengthening STD Prevention and Control for Health Departments

Technical Assistance Note # 3| Conduct syphilis surveillance

From Strategy Area I: Conduct Surveillance
3. Conduct syphilis surveillance a. Collect, manage, analyze, interpret and disseminate data on identified cases of syphilis, ensuring timely capture of core epidemiologic variables available on laboratory reports: age, sex, county, diagnosing facility type, and specimen collection date b. To better understand primary and secondary (P&S) syphilis epidemiology, conduct provider follow-up and, if needed, brief patient interviews of **all cases of P&S syphilis**. Ensure timely and quality capture of core epidemiologic variables including, but not limited to: age, sex, county, diagnosing facility type, specimen collection date, race/ethnicity, gender identity/sexual orientation, sex of sex partner(s), pregnancy status, clinical signs/symptoms, HIV status, substance use, treatment received, date of treatment, and history of syphilis

Why DSTDP included these strategies

Syphilis is a genital ulcerative disease caused by the bacterium *Treponema pallidum* that can lead to severe clinical complications and can facilitate HIV transmission. Following a historically low rate of primary and secondary (P&S) syphilis among the US population in 2001, rates of P&S syphilis have increased almost every year. Syphilis surveillance is an important element of tracking these trends over time, and regular examination of data quality and case burden are central to timely identification of reporting issues and of potential changes in syphilis rates.

Rises in rates of P&S syphilis have coincided with increases in cases among men who have sex with men (MSM), who accounted for the majority of reported cases from 2012 to 2016. However, rates of P&S syphilis have also been increasing among men who have sex with women only (MSW) and women, sometimes by greater percentages than rates among MSM. Because of this, accurate data on sex and sex of sex partner(s) are essential for monitoring changes among these subpopulations. In addition, new data regarding gender identity and sexual orientation will enable epidemiologists to examine trends in P&S syphilis among gender and sexual minorities according to identity for the first time.

Key definitions

MSM: Men who have sex with men
MSW: Men who have sex with women only

Considerations for implementation

Data Collection, Management, Analysis, Interpretation, & Dissemination for All Stages of Syphilis

- Follow the best practices for case-based STD surveillance covered in Technical Note #1.

- Verify that syphilis cases are categorized according to the most recent case definitions from CSTE and that providers are consistently supplying sufficient data to determine syphilis stage.
- Syphilis cases should reported by stage at the time of initial examination, which is often the time of initial specimen collection and not the time of treatment or interview.
- Update case information with new data obtained via follow-up with clinicians and patient interviews. If data sources are stored separately, develop a method for linking the data and update the combined data sources regularly.

Understanding Primary & Secondary Syphilis Epidemiology

- Conduct provider follow-up after laboratory reporting to determine treatment status and date for cases.
- Encourage providers to fill out case report forms. To go above and beyond, monitor provider case reporting and develop strategies for improving cooperation by providers.
- Collect and report data to CDC in a way that is consistent with the generic and STD message mapping guides (MMGs), including federally compliant race and ethnicity reporting as well as data on gender identity and sexual orientation. Adapt case report forms as necessary to reflect the variables and value sets.
- Capture complete data for variables that facilitate P&S syphilis epidemiology among subpopulations, such as individuals known to be living with diagnosed HIV, pregnant women, MSM, individuals with gender and sexual minority identities, and racial and ethnic minority individuals.
- For information regarding the sex of sex partners in the past year, complete all fields. For example, if a person has had only female partners, record "0" for number of male partners. This allows for more accurate categorization of behavioral risk.
- Minimize reporting missing or "unknown" responses for core and enhanced variables. To go above and beyond, implement quality improvement activities to reduce the proportion of cases with missing data.
- Conduct brief patient interviews of all cases of P&S syphilis, prioritizing pregnant women, male partners of women who are pregnant or who are of reproductive age, and men who have sex with men.
- Incorporate strategies to ascertain HIV status among P&S syphilis cases, including regular matching with eHARS. In the absence of eHARS data, refer to participant self-report. If eHARS data and patient self-report data are both available and are in conflict, select the most complete response. For example, if one source lists an indeterminate result and the other reports an HIV-negative result, record "HIV-negative." If one source indicates a case HIV-negative and the other indicates HIV-positive, record "HIV-positive."
- Record substance use data as completely as possible, selecting "yes" or "no" for each item. Avoid reporting only positive responses and leaving remaining items blank.
- To go above and beyond, consider using alternative data sources such as Medical Monitoring Project data, data from National HIV Behavioral Surveillance, and STD clinic data to examine P&S syphilis among key risk groups and according to HIV coinfection.

Strategies specific to congenital syphilis surveillance are provided in **TA Note #4**. Strategies specific to surveillance of adverse outcomes of STDs, such as neurosyphilis and otic/ ocular syphilis, are provided in **TA Note #5.**

Core variables for P&S syphilis include variables beyond those are considered core for chlamydia and gonorrhea, specifically race/ethnicity, gender identity/sexual orientation, sex of sex partner(s), pregnancy status, clinical signs/symptoms, HIV status, substance use, treatment received, date of treatment, and history of syphilis.

Other resources

- 2018 syphilis case definitions: https://wwwn.cdc.gov/nndss/conditions/syphilis/case-definition/2018/
- Recommendations for syphilis surveillance in the United States: https://www.cdc.gov/std/syphsurvreco.pdf
- Syphilis chapter in the 2017 STD Surveillance Report: https://www.cdc.gov/std/stats17/Syphilis.htm
- Webinar on syphilis staging: https://cste.webex.com/cste/lsr.php?RCID=a2c301a1f806ae978eb8b57e90d28413
- Message mapping guides: https://wwwn.cdc.gov/nndss/case-notification/message-mapping-guides.html
- NETSS Implementation Guide: https://www.cdc.gov/std/program/STD-NETSSIMPLN-V5_2018Jan.pdf
- Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity: https://obamawhitehouse.archives.gov/omb/fedreg_1997standards

For more information or feedback on this document, contact your DSTDP Prevention Specialist or email STD_PCHD@cdc.gov. CDC's Division of STD Prevention, Program Development and Quality Improvement Branch, developed this document for recipients of PS19-1901 STD PCHD to provide additional clarification of strategies outlined in that NOFO and to support program implementation. The content here does not represent additional NOFO requirements nor official CDC recommendations. Issue date: April 2019