Sexually Transmitted Diseases in California
2015 Executive Summary

In 2015, the burden of notifiable bacterial sexually transmitted diseases (STDs) in California (chlamydia, gonorrhea, and syphilis) continued to be substantial and increasing when compared against 2014 and the prior five years. In this summary, we describe differences in STD burden over time, geography, and demographic characteristics to inform the design and implementation of state and local interventions to reduce STD transmission and improve sexual and reproductive health.

California continues to be ranked first among all states in 2015 based on preliminary CDC data for the total number of cases for chlamydia, gonorrhea, syphilis, and congenital syphilis.  

**OVERALL SUMMARY**

In 2015, bacterial sexually transmitted diseases (STDs) in California (chlamydia, gonorrhea, and syphilis) significantly increased. Important disparities persist, with the highest rates found among young people, African-Americans, and gay, bisexual and other men who have sex with men (MSM).

Chlamydia (CT) remains the most common reportable disease in California and is at the highest level since reporting was mandated in 1990 with a 9% increase in cases compared with 2014. The highest rates were among young women. The rate increase among males (12%) was twice the increase among females (6%). Rates among African-American teens and young adult women were the highest of any group, and three to five times higher than white young women.

Gonorrhea (GC) cases and rates continued to increase sharply across all regions of the state with an overall 20% rate increase compared with 2014. Between 2014 and 2015, male rates increased 22% while female rates increased 15%. Rates were highest for both genders among those under age 30. Racial disparities persisted with rates among African-Americans five times higher than among whites.

Early syphilis cases (primary, secondary, and early latent) continued to increase across all regions of California with an overall 29% increase compared with 2014 cases. Although 63% of cases were among MSM, the number of cases among females of reproductive age also continued to rise and increased by 46% compared with 2014. Racial disparities continued with African-American male rates being twice as high as among white males.

1 Tables:  [http://www.cdph.ca.gov/data/statistics/Documents/STD-Data-All-STDs-Tables.pdf](http://www.cdph.ca.gov/data/statistics/Documents/STD-Data-All-STDs-Tables.pdf)
2 [http://www.cdc.gov/std/stats14/default.htm](http://www.cdc.gov/std/stats14/default.htm)
The number of infants born with congenital syphilis (CS) increased for the third consecutive year and by 39% over 2014 cases. The burden of CS cases of this magnitude was last observed in 1997-1998.

**DISEASE-SPECIFIC SUMMARY**

**Chlamydia (CT)** remains the most frequently reported disease in California.³

- There were 189,937 CT cases reported in 2015, a 9% increase over 2014 and 15% increase since 2011.
- San Francisco, Kern, and Fresno Counties ranked first, second and third in terms of incidence rates (number of reported cases taking population size into account).
- Female CT rates were 1.8 times the male CT rates. The difference is partially due to more frequent use of reproductive healthcare services, which typically includes chlamydia screening for females.
- Trends in female CT rates had been relatively stable since 2011, but showed a 6% increase between 2014 and 2015.
- Female CT rates continued to be highest among adolescent and young adults ages 15-24 years, which demonstrates the need for screening of young females to prevent reproductive health complications.
- After three years of declining CT rates among adolescent females (ages 15-19 years), the rate increased 4% in 2015 compared with 2014.
- Adolescent African-American female CT rates remained high and were five times the rate among white adolescents. After a striking decline of 27% in these rates between 2011 and 2014, the rate appears to have stabilized in 2015.
- Male CT rates have increased statewide by 12% since 2014 and 28% since 2011. Regionally, San Francisco reported striking increases in male rates of 35% since 2014 and nearly doubled since 2011. These increases may reflect increases in transmission or increased access to rectal screening among MSM.
- Prevalence monitoring data from selected clinical settings indicated that juvenile detention facilities continued to have the highest rates of CT infection as compared with family planning and manage care facilities. In 2015, juvenile detention chlamydia positivity increased from 11.6% to 13.2% for females and 4.3% to 6.8% for males when compared to 2014.

**Gonorrhea (GC)** rates continued to increase sharply across all regions of the state.⁴

- There were 54,255 GC cases reported in 2015 representing a 20% increase over 2014 and a doubling since 2011.

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Increases in GC cases and rates of at least 10-20% and higher were noted across almost all counties. San Francisco, Lake, and Shasta Counties had the highest rates.

GC male cases rose significantly (23% since 2014 and more than doubled since 2011). There were also increases in female cases albeit of a smaller magnitude compared to the male cases.

Reasons for these increases are not yet clear, and may include increased transmission as well as increased oral and rectal screening of MSM.

The highest GC rates for females were among ages 20-24 years and for males were among ages 25-29 years.

Disparities in GC cases and rates by race/ethnicity persisted, with African-American GC rates five times those of white rates. Steep increases were observed in African-American male GC rates (64% increase since 2011).

Gonococcal Isolate Surveillance Project monitoring of trends in antibiotic susceptibility indicated that there was a consistent decline from 2010 to 2015 in the proportion of gonococcal isolates with decreased susceptibility to recommended cephalosporin therapy. Of the 816 isolates analyzed in 2015, no specimens exhibited decreased susceptibility to ceftriaxone (minimum inhibitory concentration (MIC) ≥ 0.25 μg/mL) or cefixime (MIC ≥ 0.5 μg/mL); 1.1% (9 isolates) exhibited decreased susceptibility to azithromycin (MIC ≥ 2.0 μg/mL) which is part of recommended gonorrhea dual therapy with ceftriaxone.

**Early syphilis (ES)**, which includes primary, secondary, and early latent stages, continued to increase in 2015 in all regions of the state.⁵

- There were 9,359 ES cases reported in 2015. This represents a 29% increase over 2014, and a two-fold increase since 2011. Much of these increases have been among MSM who comprised 63% of cases.
- Among MSM ES cases whose HIV status was known, 56% were HIV-positive.
- Persistent disparities in ES rates by race/ethnicity continued: ES male rates were twice as high among African-American males compared with white males. Disparities by race were highest for ages 20-24 years with African American male ES rates four times higher than for white male ES cases.
- San Francisco, Fresno, Los Angeles, and Kern Counties were the highest ranked for ES rates in the state.
- Although females were a small proportion of ES cases, there were striking increases of 46% noted in female cases of reproductive age (15-44 years) since 2014 and a four-fold increase since 2011.
- Potential increases in ocular syphilis, a serious manifestation of syphilis, were noted nationally in early 2015.⁶ Analysis of California case data from 2014-2015 indicated

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⁵ Tables: [http://www.cdph.ca.gov/data/statistics/Documents/STD-Data-Syphilis-TotalEarly-Tables.pdf](http://www.cdph.ca.gov/data/statistics/Documents/STD-Data-Syphilis-TotalEarly-Tables.pdf)
that <1% of all syphilis cases had symptoms associated with ocular syphilis.\textsuperscript{7} The CDPH disseminated a provider health alert regarding a potential increase in cases and guidance regarding recognition and reporting of symptoms associated with ocular syphilis to enable ongoing monitoring and effective public health response.\textsuperscript{8}

**Congenital syphilis (CS)** increased for the second consecutive year.\textsuperscript{9}

- In 2015, 142 cases of CS were reported, an increase of 39% over the 102 CS cases in 2014 and three-fold higher when compared with the 46 CS cases in 2011.
- The 2015, increases in CS cases were reported primarily in the Central Inland region with most cases in Kern and Fresno Counties, which accounted for nearly half of the CS cases for California.
- Los Angeles County had a notable decrease from 36 CS cases in 2014 to 23 cases in 2015 but still higher than the low point of 7 cases in 2012.
- Factors associated with recent CS cases included lack of or late prenatal care, inadequate treatment, poverty, and substance abuse.

**Guidance for Navigating the 2015 STD Annual Report**

The 2015 STD Annual Report is structured so as to enable access to data in a variety of formats. The 2015 Annual Report is comprised of the Executive Summary, Technical Notes, STD tables, and graph slides and is organized by All STDs and specific STDs on the STD Data page (http://www.cdph.ca.gov/data/statistics/Pages/STDData.aspx). The Annual Report includes 2015 and trend data on STD and related services, e.g. screening, collected through case-based reporting as well as enhanced surveillance, prevalence monitoring, health care programs, and laboratory surveys.

\textsuperscript{7} MMWR in progress (link will be added as soon as CDC posts)
\textsuperscript{9} Tables: http://www.cdph.ca.gov/data/statistics/Documents/STD-Data-Syphilis-Congenital-Tables.pdf
    Slides: http://www.cdph.ca.gov/data/statistics/Documents/STD-Data-Syphilis-Congenital-Slides.pptx