STD/HIV Update 2019

Valerie Dulay
Epidemiologist
May 8, 2019
• Reportable conditions by providers and laboratories
  • Chlamydia, Gonorrhea & Syphilis (including congenital syphilis)
  • Not reported: Herpes, HPV, NGU, Scabies & Lice

• San Bernardino County received **21,090** STD reports in 2018
  • Increased by **3%** from 2017

• Communicable Disease Investigators (CDIs) follow
  • Untreated cases and partners
  • Priority cases: very young, pregnant, juvie & HIV-coinfected
Younger Demographic

- Burden of disease shifting to younger demographic
  - Short duration of relationships common
  - Tend to have more partners due to online dating culture
  - Lack of access to health information and services

- 2018 cases in the 15-24 age range:
  - 60% positive for chlamydia
  - 40% positive for gonorrhea
  - 29% staged primary and secondary syphilis
  - 32% gave birth to a baby with congenital syphilis
  - 24% new HIV cases (2017)
Chlamydia Incidence Rates

Incidence Rates for Chlamydia in San Bernardino County, California, and the United States, 2008-2018

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*2018 data for San Bernardino County is preliminary.
**CA and US data for 2018 were not available at the time this report was published.
Chlamydia in San Bernardino County Metropolitan Areas, 2018
Chlamydia

- Total of 13,382 reports received in 2018
  - 13,376 of which were confirmed, probable or suspect cases
- Females accounted for 70% of all cases
  - 15-24 years of age accounted for 64% of female cases
- A majority of cases were asymptomatic
  - Only 8% showed signs/symptoms
- Becoming re-infected is possible even after treatment
  - CDPH states that nearly 14% of women become re-infected within months of treatment
- Untreated females may experience complications with their pregnancy or reproductive health

Source: Centers for Disease Control and Prevention (CDC)
### Gonorrhea Incidence Rates

*Incidence Rates for Gonorrhea in San Bernardino County, California, and the United States, 2008-2018*

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Gonorrhea in San Bernardino County High Desert, 2018
Gonorrhea

• Total of 3,940 reports received in 2018
  • 3,909 of which were confirmed, probable or suspect cases

• Males accounted for 54% of all cases
  • MSM accounted for 12% of male cases
  • CDPH states that MSM should be tested at all anatomic sites of exposure
    • Urine only testing can miss extra genital infections
    • MSM are more likely to be co-infected with HIV

• Becoming re-infected is possible even after treatment
  • CDPH states that nearly 12% of women become re-infected within months of treatment

• CDC has labeled resistance in Gonorrhea an urgent threat
  • 30% of isolates have some resistance to an antibiotic
  • Two antibiotics are now required for treatment – last line of defense

Source: Centers for Disease Control and Prevention (CDC)
Incidence Rates for Syphilis (All Stages) in San Bernardino County, California, and the United States, 2008-2018

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Syphilis (All Stages)

• Annually, the number of cases are increasing nationwide

• Total of 3,680 reports received in 2018
  • 1,512 of which were confirmed or probable cases

• Males accounted for 67% of all cases
  • MSM accounted for 38% of male cases
  • 36% are also co-infected with HIV

• The number of female cases have nearly tripled since 2016
  • Risk of congenital syphilis if untreated during pregnancy

Source: Centers for Disease Control and Prevention (CDC)
Syphilis (Primary & Secondary) Incidence Rates

Incidence Rates for Syphilis (Primary & Secondary) in San Bernardino County, California, and the United States, 2008-2018

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Syphilis (Primary and Secondary) in San Bernardino County Metropolitan Areas, 2018
Syphilis (Primary and Secondary) in San Bernardino County High Desert, 2018
Syphilis (Primary & Secondary)

• In 2017, San Bernardino County ranked #31 in primary and secondary syphilis case numbers compared to all U.S. counties

• Total of 333 reports received in 2018
  • 313 of which were confirmed or probable cases

• Males accounted for 80% of all cases

• Primary and secondary syphilis are the most infectious stages of syphilis
  • Signs and symptoms associated with each stage
  • Treatment for both stages are the same
Syphilis (Primary & Secondary)

**Primary**

**Secondary**

[Images of primary and secondary symptoms of syphilis]
Syphilis (Congenital) Incidence Rates

Incidence Rates for Syphilis (Congenital) in San Bernardino County, California, and the United States, 2008-2018

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Syphilis (Congenital) in San Bernadino County Metropolitan Areas, 2018
Syphilis (Congenital) in San Bernardino County High Desert, 2018
In 2017, San Bernardino County ranked #9 in congenital syphilis rates compared to all CA counties.

Total of 87 reports received in 2018
- 34 of which were actual cases

32% of female cases who gave birth to a baby with CS were in the 15-24 age range

30% of female cases who gave birth to a baby with CS have used/were using recreational drugs before or throughout their pregnancy

Congenital syphilis cases are associated with recreational drug use, incarceration, lack of prenatal care, poverty and/or homelessness
https://youtu.be/N1jyR2Ib0Ec
STD & HIV Connection

- Being infected with STDs increases the chance of being infected with or transmitting HIV by 3-6 times
  - Open sores and cell layer breakdown provide pathway to bloodstream
  - White blood cells fighting an STD provide receptors for HIV
  - Infections lower natural defenses in vagina (pH and good bacteria)
  - Gonorrhea may increase the amount of HIV in semen
HIV Incidence Rates

Incidence Rates for HIV in San Bernardino County, California, and the United States, 2007-2017

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HIV Incidence Rates by Race/Ethnicity

HIV Incidence Rates by Race/Ethnicity, San Bernardino County, 2007-2017

- **White**
- **Hispanic**
- **African American**
- **All**
HIV Prevention

• Prevention with positives
  • Linkage to care, treatment adherence and support services to maintain undetectable viral loads
  • 81% of all persons living with HIV and are in care have undetectable viral loads which make them less infectious
  • New focus on acute HIV infections who are very infectious

• Why HIV testing is important
  • Many people with STDs are co-infected with HIV
  • Approximately 16% of HIV+ cases are unaware of their diagnosis
  • Approximately 23% of new HIV cases develop AIDS within 90 days
  • Public Health departments can notify partners and further prevent the infection from spreading
HIV Prevention (continued)

- Pre-Exposure Prophylaxis (PrEP)
  - High risk individuals take HIV meds to prevent from becoming infected
  - Truvada – 2 HIV meds: 1 pill taken per day
  - Must continue to use condoms
  - Early side effects are mild and usually disappear
  - Clinical studies – reduced risk up to 90%
    - MSM, discordant heterosexual couples
  - Requires regular medical monitoring
  - Many insurances will pay for PrEP
CDS STD Activities

• STD Task Force
  • Goals: raise awareness, look for interventions and decrease STDs in the County
  • Attendees: providers, health agency representatives, community organizations, school representatives and youth

• STD Testing Van
  • Van parks in designated Hot Spots including schools and parks where target demographic would be
  • Tests include chlamydia, gonorrhea, syphilis and HIV rapid tests
  • Test and results are given in the same visit for chlamydia and gonorrhea

• Jail Testing
  • Women under 35 years of age offered STD testing by vaginal swab
CDS STD Activities (continued)

• **Partnership with Providers**
  • Presentations at birthing hospitals in the County about congenital syphilis
    • Testing algorithm
    • Signs/symptoms associated with each stage
    • Proper treatment for each stage
    • Reporting guidelines
  • CDS encourages providers to…
    • Educate patients
    • Request thorough sexual history
    • Testing/referral of partners
    • Provide treatment to partners
    • Report complete and in a timely manner to CDS
    • Link STD investigations with HIV testing
Questions?

Call CDS at
1-800-722-4794