Sexually Transmitted Diseases Summary Report
Santa Barbara County 2013-2017

Michelle Wehmer, MPH - Epidemiologist

Improve the health of our communities by preventing disease, promoting wellness, and ensuring access to needed health care.
Chlamydia Case Rates

Chlamydia Cases by Birth Sex

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>563</td>
<td>617</td>
<td>717</td>
<td>757</td>
<td>767</td>
</tr>
<tr>
<td>Female</td>
<td>1321</td>
<td>1395</td>
<td>1573</td>
<td>1548</td>
<td>1684</td>
</tr>
</tbody>
</table>

Source: STD Control Branch for 2013-2017 data; CalREDIE for SBC data.

Michelle Wehmer, MPH
Chlamydia Rates by Birth Sex

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>SBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>259.3</td>
<td>614.0</td>
<td>432.8</td>
</tr>
<tr>
<td>2014</td>
<td>281.3</td>
<td>642.4</td>
<td>456.2</td>
</tr>
<tr>
<td>2015</td>
<td>320.3</td>
<td>709.9</td>
<td>514.8</td>
</tr>
<tr>
<td>2016</td>
<td>335.8</td>
<td>697.7</td>
<td>515.3</td>
</tr>
<tr>
<td>2017</td>
<td>337.9</td>
<td>754.4</td>
<td>544.4</td>
</tr>
</tbody>
</table>

SBC Chlamydia Patients, 2017. N=2451

Patient Age*

- <15: 20, 1%
- 15-19: 84, 3%
- 20-24: 171, 7%
- 25-29: 42, 2%
- 30-34: 1033, 42%
- 35-39: 612, 25%
- 40-44: 434, 18%
- 45-49: 12, 1%
- 50-54: 84, 3%
- 55-59: 42, 2%
- 60+: 8, 0%

* 7 patients did not have DOB or age documented

Region of Residency

- North: 53, 2%
- Central: 1212, 50%
- South: 808, 33%
- Other: 378, 15%

Race & Ethnicity

- AI/AN: 832, 34%
- Asian/PI: 516, 21%
- Black: 958, 39%
- Latino: 65, 3%
- White: 76, 3%
- Other/Multi/unk: 4, 0%

Source: STD Control Branch/CalREDIE.

Michelle Wehmer, MPH
SBC Chlamydia cases and Co-infection, 2017.
N=2204 individuals

2125, 96%

2, 0%
11, 1%
1, 0%
65, 3%

Source: STD Control Branch/CalREDIE.
*247 reinfections = 2451 total infections in 2017 of 2204 individuals

Michelle Wehmer, MPH
Gonorrhea Case Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>SBC</th>
<th>CA</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>27.8</td>
<td>99.9</td>
<td>105.3</td>
</tr>
<tr>
<td>2014</td>
<td>46.1</td>
<td>115.9</td>
<td>109.8</td>
</tr>
<tr>
<td>2015</td>
<td>75.4</td>
<td>138.8</td>
<td>123.0</td>
</tr>
<tr>
<td>2016</td>
<td>72.0</td>
<td>164.4</td>
<td>145.0</td>
</tr>
<tr>
<td>2017</td>
<td>83.7</td>
<td>190.3</td>
<td>171.9</td>
</tr>
</tbody>
</table>

Gonorrhea Cases by Birth Sex

Source: STD Control Branch for 2013-2016 data; CalREDIE for 2017 data.
Gonorrhea Rates by Birth Sex

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>26.7</td>
<td>52.0</td>
<td>92.0</td>
<td>75.4</td>
<td>97.4</td>
</tr>
<tr>
<td>Female</td>
<td>29.3</td>
<td>41.0</td>
<td>58.7</td>
<td>69.0</td>
<td>69.9</td>
</tr>
<tr>
<td>SBC</td>
<td>27.8</td>
<td>46.1</td>
<td>75.4</td>
<td>72.2</td>
<td>83.7</td>
</tr>
</tbody>
</table>

SBC Gonorrhea Patients, 2017. N=377

Patient Age

- 15-19: 3, 1%
- 20-24: 13, 3%
- 25-29: 58, 15%
- 30-34: 83, 22%
- 35-39: 124, 33%
- 40-44: 114, 30%
- 45-49: 59, 16%
- 50-54: 20, 5%
- 55-59: 10, 3%
- 60+: 2, 1%

Region of Residency

- North: 204, 54%
- Central: 59, 16%
- South: 114, 30%

Race & Ethnicity

- AI/AN: 1, 0%
- Asian/PI: 11, 3%
- Black: 84, 23%
- Latino: 155, 41%
- White: 114, 30%
- Other/Multi/unk: 12, 3%

Source: STD Control Branch/CalREDIE.

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SBC Gonorrhea cases: Co-infection, 2017. N=358

- 274 cases, 77%
- 65 cases, 18%
- 3 cases, 1%
- 6 cases, 2%

Source: STD Control Branch/CalREDIE; 20 cases were re-infected with gonorrhea in the same calendar year.
* 1 case of G/newly dx HIV was also co-infected with Syphilis
** 2/6 were co-infected with G/C/S
** 4/6 were co-infected with C/G and previously dx with HIV

Michelle Wehmer, MPH
P, S & EL Syphilis Case Rates

P, S & EL Syphilis Cases by Birth Sex

Source: STD Control Branch for 2013-2016 data; CalREDIE for 2017 data.
P, S & EL Syphilis Case Rates by Birth Sex

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>SBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>10.6</td>
<td>0.5</td>
<td>5.6</td>
</tr>
<tr>
<td>2014</td>
<td>12.3</td>
<td>1.4</td>
<td>6.9</td>
</tr>
<tr>
<td>2015</td>
<td>24.6</td>
<td>3.2</td>
<td>13.9</td>
</tr>
<tr>
<td>2016</td>
<td>19.1</td>
<td>4.5</td>
<td>11.8</td>
</tr>
<tr>
<td>2017</td>
<td>26.9</td>
<td>4.9</td>
<td>16.0</td>
</tr>
</tbody>
</table>


Michelle Wehmer, MPH
**P, S & EL Syphilis Patients, SBC 2017. N=72**

### Patient Age

- **15-19**: 9, 12%
- **20-24**: 5, 7%
- **25-29**: 3, 4%
- **30-34**: 6, 8%
- **35-39**: 6, 8%
- **40-44**: 10, 14%
- **45-49**: 9, 13%
- **50-54**: 13, 18%
- **55-59**: 8, 11%
- **60+**: 4, 6%

### Region of Residency

- **North**: 6, 9%
- **Central**: 44, 64%
- **South**: 19, 27%

### Race & Ethnicity

- **AI/AN**: 9, 13%
- **Asian/PI**: 13, 18%
- **Black**: 8, 11%
- **Latino**: 9, 13%
- **White**: 10, 14%
- **Other/Multi/unk**: 5, 7%

Source: STD Control Branch/CalREDIE.

Michelle Wehmer, MPH
SBC Syphilis cases: Co-infection, 2017. N=72

- **S-only**: 51, 71%
- **S/previous HIV**
- **S/new HIV**
- **S/G/C**: 2, 3%

Source: STD Control Branch/CalREDIE.

*1/15 of the previously diagnosed HIV patients was co-infected with Syphilis and Chlamydia
**1/4 co-infected Syphilis-new HIV cases was also diagnosed with Gonorrhea

Michelle Wehmer, MPH
Females P&S Syphilis and Congenital Syphilis Cases California, 2012-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Syphilitic Stillbirths</th>
<th>Congenital</th>
<th>Females P,S&amp;EL</th>
<th>Female P,S&amp;EL Rate</th>
<th>Congenital Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>1</td>
<td>33</td>
<td>248</td>
<td>1.3</td>
<td>6.6</td>
</tr>
<tr>
<td>2013</td>
<td>7</td>
<td>58</td>
<td>400</td>
<td>2.1</td>
<td>11.7</td>
</tr>
<tr>
<td>2014</td>
<td>8</td>
<td>103</td>
<td>612</td>
<td>3.1</td>
<td>20.5</td>
</tr>
<tr>
<td>2015</td>
<td>13</td>
<td>148</td>
<td>882</td>
<td>4.5</td>
<td>30.1</td>
</tr>
<tr>
<td>2016</td>
<td>12</td>
<td>214</td>
<td>1325</td>
<td>6.7</td>
<td>43.8</td>
</tr>
<tr>
<td>2017</td>
<td>30</td>
<td>283</td>
<td>1462</td>
<td>18.5</td>
<td>58.2</td>
</tr>
</tbody>
</table>

* CDPH has not released information on 2017 Female syphilis counts and rates

Michelle Wehmer, MPH
Newly Diagnosed HIV Cases* by Birth Sex

Source: Office of AIDS/HARS database
*Resident of SBC at time of diagnosis
HIV Case Rates by Birth Sex

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>SBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>7.4</td>
<td>1.4</td>
<td>4.4</td>
</tr>
<tr>
<td>2014</td>
<td>10.9</td>
<td>0.9</td>
<td>6.0</td>
</tr>
<tr>
<td>2015</td>
<td>8.5</td>
<td>0.9</td>
<td>4.7</td>
</tr>
<tr>
<td>2016</td>
<td>12.0</td>
<td>0.9</td>
<td>6.5</td>
</tr>
<tr>
<td>2017</td>
<td>10.6</td>
<td>1.3</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source: Office of AIDS/HARS database
State of California, Department of Finance, State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010-2060. Sacramento, California, January 2018 for population estimates.
SBC* Newly DX HIV Patients, 2017. N=27

**Patient Age**

- <15: 1, 4%
- 15-19: 5, 19%
- 20-24: 6, 22%
- 25-29: 4, 15%
- 30-34: 3, 11%
- 35-39: 3, 11%
- 40-44: 2, 7%
- 45-49: 2, 7%
- 50-59: 3, 11%
- 60+: 1, 4%

**Race & Ethnicity**

- Black: 10, 37%
- Latino: 1, 4%
- White: 16, 59%

**Region of Residency**

- North: 14, 52%
- Central: 4, 15%
- South: 9, 33%

**Risk Factor**

- MSM: 1, 4%
- IUD: 1, 4%
- MSM & IUD: 1, 4%
- Heterosexual contact: 8, 29%
- No Risk Factor Identified: 16, 59%

Source: Office of AIDS, HARS database
*Resident of SBC at time of HIV diagnosis

Michelle Wehmer, MPH

<table>
<thead>
<tr>
<th>Quarter</th>
<th>HIV Infection (# AIDS at diagnosis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter 1 (Jan-Mar)</td>
<td>7 (1)</td>
</tr>
<tr>
<td>Quarter 2 (Apr-June)</td>
<td>8 (1)</td>
</tr>
<tr>
<td>Quarter 3 (July-Sept)</td>
<td>10 (0)</td>
</tr>
<tr>
<td>Quarter 4 (Oct-Dec)</td>
<td>2 (0)</td>
</tr>
<tr>
<td>Total</td>
<td>27 (2)</td>
</tr>
</tbody>
</table>

Source: Office of AIDS, HARS database
*Resident of SBC at time of diagnosis

Michelle Wehmer, MPH
Santa Barbara County Residents Living with HIV/AIDS by Current Location, 2017.
N=545

South, 330, 61%
North, 122, 22%
Central, 93, 17%

Source: HARS database
Of the 545 Santa Barbara County residents living with HIV, 38 individuals had 1 or more STDs in 2017.

Source: CalREDIE and Office of AIDS 2018 HARS database

Michelle Wehmer, MPH
Epidemiology Summary

• Rates of chlamydia, gonorrhea and early syphilis are rising significantly in SBC, CA and the US
  • 2017 data suggests that all these trends have peaked, but still high
  • Consistently 70% of reported chlamydia cases are in females
  • 60% of 2017 gonorrhea cases were in males
    • Previously reported cases were equally proportioned across sex except in 2015 (also 60%)
• Syphilis has the smallest case numbers but very dramatic increase the last few years and continuing increase in the female population as the male counts are decreasing
  • Female syphilis cases increase the likelihood of congenital syphilis and possible syphilitic stillbirths
    • SBC has had 6 congenital cases since 2013
• 29% (21/72) of syphilis cases were co-infected with another STD, of those co-infected, 19% (4/21) were co-infected with HIV
Epidemiology Summary (Continued)

- HIV incidence rates (new cases) are mostly stable over past 5 years
  - Approximately 7% of newly diagnosed HIV cases in 2017 had AIDS at time of diagnosis; a sharp decrease from 2016 (23%, 6/26)
- Approximately 6% (35/545) of HIV residents were diagnosed with another STD in 2017
  - 22% (6/27) of those newly diagnosed HIV residents were co-infected with an additional STD
    - 15% (4/27) were diagnosed with syphilis
  - Approximately 6% (35/545) of HIV residents were diagnosed with another STD in 2017
- Chlamydia & gonorrhea have higher incidence in younger populations (85% and 70% of cases were diagnosed in person less than 30 years old)
- Early syphilis and new HIV cases were seen throughout sexually active age groups (41% and 37% of cases were under 30)
THANK-YOU!

Michelle Wehmer, MPH
Epidemiologist
michelle.wehmer@sbcphd.org

Improve the health of our communities by preventing disease, promoting wellness, and ensuring access to needed health care.