State of STDs in New Jersey

DIVISION OF HIV, STD AND TB SERVICES
NEW JERSEY DEPARTMENT OF HEALTH
Greta Anschuetz, MPH

Became Director for STD Services at the New Jersey Department of Health (NJDOH) Division of HIV, STD, Tb Services (DHSTS) in April 2018.

Previously worked at the Philadelphia Department of Public Health, STD Control for 11 years.

Received my Masters in Public Health (Epidemiology) from Drexel University.

Michigan is home!
STDs Are on the Rise!

<table>
<thead>
<tr>
<th>Disease</th>
<th>United States 2017</th>
<th>New Jersey 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Cases</td>
<td>Rate Increase since 2013</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>1.7 million</td>
<td>22%</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>555,608</td>
<td>67%</td>
</tr>
<tr>
<td>Primary &amp; Secondary Syphilis</td>
<td>30,644</td>
<td>76%</td>
</tr>
<tr>
<td>Congenital Syphilis</td>
<td>918</td>
<td>154%</td>
</tr>
</tbody>
</table>
Why are STDs going up?

Increase in condom-less sex?
  ◦ Era of Pre-exposure prophylaxis (PrEP) → more routine testing for men who have sex with men (MSM)

Finding new populations to impact?
  ◦ Women and babies

Increase in anonymous sex?
  ◦ Dating apps on phones make finding sex partners easier

Better reporting/testing/following of screening guidelines?

Loss of public health funding forcing STD Clinics to reduce hours/close?

Chlamydia and Gonorrhea
Reported Chlamydia Trend in New Jersey, 2012-2017

<table>
<thead>
<tr>
<th>Year of Report</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>27,271</td>
</tr>
<tr>
<td>2013</td>
<td>28,327</td>
</tr>
<tr>
<td>2014</td>
<td>29,950</td>
</tr>
<tr>
<td>2015</td>
<td>31,377</td>
</tr>
<tr>
<td>2016</td>
<td>34,565</td>
</tr>
<tr>
<td>2017</td>
<td>35,304</td>
</tr>
</tbody>
</table>
Reported Chlamydia Trends by Age Group, New Jersey, 2012-2017
Rates of Chlamydia per 100,000 Population by Age and Gender:
New Jersey, 2017

Age Groups (Years)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;15</td>
<td>4.8</td>
<td>24.3</td>
</tr>
<tr>
<td>15-19</td>
<td>689.3</td>
<td>2,488.6</td>
</tr>
<tr>
<td>20-24</td>
<td>1,453.0</td>
<td>3,412.9</td>
</tr>
<tr>
<td>25-29</td>
<td>814.5</td>
<td>1,407.6</td>
</tr>
<tr>
<td>30-34</td>
<td>3356.7</td>
<td>561.2</td>
</tr>
<tr>
<td>35+</td>
<td>65.3</td>
<td>63.5</td>
</tr>
<tr>
<td>Total</td>
<td>259.9</td>
<td>520.5</td>
</tr>
</tbody>
</table>
Chlamydia cases by County

Top 5 Counties by reported Chlamydia Infections:

- Essex
- Camden
- Hudson
- Passaic
- Middlesex
Reported Gonorrhea Trend in New Jersey, 2012-2017

<table>
<thead>
<tr>
<th>Year of Report</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>7,486</td>
</tr>
<tr>
<td>2013</td>
<td>7,015</td>
</tr>
<tr>
<td>2014</td>
<td>6,648</td>
</tr>
<tr>
<td>2015</td>
<td>7,236</td>
</tr>
<tr>
<td>2016</td>
<td>8,171</td>
</tr>
<tr>
<td>2017</td>
<td>9,454</td>
</tr>
</tbody>
</table>
Reported Gonorrhea Trends by Age Group, New Jersey, 2012-2017
Rates of Gonorrhea per 100,000 Population by Age and Gender:
New Jersey, 2017

Age Group (Years) | Rates of Gonorrhea per 100,000 Population
--- | ---
>15 | 1.7 Male, 5.8 Female
15-19 | 260.5 Male, 382.1 Female
20-24 | 506.5 Male, 431.1 Female
25-29 | 398.5 Male, 236.0 Female
30-34 | 1,500.0 Male, 122.5 Female
35+ | 64.7 Male, 14.9 Female
Total | 130.5 Male, 81.2 Female
Gonorrhea cases by County

Top 5 Counties by reported Gonorrhea Infections:

- Essex
- Camden
- Hudson
- Passaic
- Mercer
Gonococcal Isolates Surveillance Project (GISP/eGISP)

Select sites across the country collect isolates on the first 25 symptomatic men presenting for clinic
  ◦ Allows us to know which drugs for Gonorrhea are still working

New Jersey awarded eGISP funding in 2018
  ◦ Looking for clinics willing to participate
  ◦ Contact JoAnn HaydukKramer : JoAnn.HaydukKramer@doh.nj.gov
Prevalence of Penicillin Resistance, Elevated Cefixime, Ceftriaxone or Azithromycin MIC, by Year — GISP, 2006–2017*

* 2017 data are preliminary
Prevalence of Isolates with Elevated Azithromycin MICs (> 2.00 μg/ml), GISP, 2006-2017*

* 2017 data are preliminary
NATIONALLY

Young people account for a substantial proportion of new STIs

- **Gonorrhea**: 70%
  - Total Infections: 820,000
- **Chlamydia**: 63%
  - Total Infections: 2.9 million
- **HPV**: 49%
  - Total Infections: 14.1 million
- **Genital Herpes**: 45%
  - Total Infections: 776,000
- **HIV**: 26%
  - Total Infections: 47,500
  - Ages 13-24
- **Syphilis**: 20%
  - Total Infections: 55,400

NEW JERSEY

- **Gonorrhea**: 47%
  - Total Infections: 9,454
- **Chlamydia**: 64%
  - Total Infections: 35,304
- **HPV**: ?
- **Genital Herpes**: ?
- **HIV**: 17%
  - Total Infections: 1,148
- **Syphilis**: 24%
  - Total Infections: 1,364

Total Infections: (all ages)
Unique factors place youth at risk for STIs

**Insufficient Screening**
Many young women don’t receive the chlamydia screening CDC recommends.

**Confidentiality Concerns**
Many are reluctant to disclose risk behaviors to doctors.

**Biology**
Young women’s bodies are biologically more susceptible to STIs.

**Lack of Access to Healthcare**
Youth often lack insurance or transportation needed to access prevention services.

**Multiple Sex Partners**
Many young people have multiple partners, which increases STI risk.
Congenital Syphilis
2017 Congenital Syphilis rates per 100,000 live births
Reported Congenital Syphilis Cases New Jersey, 2012-2017
TREAT MATERNAL SYPHILIS, PROTECT BABIES

SYPHILIS DURING PREGNANCY

• CAN CAUSE STILLBIRTH OR INFANT DEATH
• 2013–2017, U.S. CONGENITAL SYPHILIS MORE THAN DOUBLED

CONGENITAL SYPHILIS: FINDINGS FROM NYC

68 CASES REVIEWED
• 2/3 OF MOTHERS WERE NOT SCREENED OR TREATED DURING PREGNANCY, AS RECOMMENDED*

CONGENITAL SYPHILIS CAN BE PREVENTED!

• SCREEN AT 1ST PREGNATAL VISIT
• REPEAT SCREENING IF AT RISK OR REQUIRED*
• TREAT MATERNAL INFECTION ASAP

NYC DOHMH Congenital Syphilis Surveillance, 2010-2016, as published in Slutsker MMWR 2018
Early Syphilis
Early Syphilis Trend in New Jersey, 2012-2017

Year of Report

- 2012: 639
- 2013: 772
- 2014: 909
- 2015: 1087
- 2016: 1228
- 2017: 1365
Syphilis Trend in New Jersey, 2012-2017

<table>
<thead>
<tr>
<th>Year of Report</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>229</td>
</tr>
<tr>
<td>2013</td>
<td>233</td>
</tr>
<tr>
<td>2014</td>
<td>297</td>
</tr>
<tr>
<td>2015</td>
<td>373</td>
</tr>
<tr>
<td>2016</td>
<td>472</td>
</tr>
<tr>
<td>2017</td>
<td>501</td>
</tr>
</tbody>
</table>

* P&S: Primary and Secondary Syphilis
Percent of Reported Early Syphilis Among Men by Gender of Sex Partner

<table>
<thead>
<tr>
<th>Year</th>
<th>MSM</th>
<th>Hetero</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>62.3%</td>
<td>22.5%</td>
<td>15.2%</td>
</tr>
<tr>
<td>2013</td>
<td>58.9%</td>
<td>22.8%</td>
<td>18.3%</td>
</tr>
<tr>
<td>2014</td>
<td>56.9%</td>
<td>18.5%</td>
<td>24.7%</td>
</tr>
<tr>
<td>2015</td>
<td>58.7%</td>
<td>19.9%</td>
<td>21.3%</td>
</tr>
<tr>
<td>2016</td>
<td>56.7%</td>
<td>20.5%</td>
<td>22.8%</td>
</tr>
<tr>
<td>2017</td>
<td>54.6%</td>
<td>23.2%</td>
<td>22.2%</td>
</tr>
</tbody>
</table>
Rates of Early Syphilis per 100,000 Population by Age and Gender:
New Jersey, 2017

<table>
<thead>
<tr>
<th>Age Groups (Years)</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;15</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>15-19</td>
<td>15.6</td>
<td>8.3</td>
</tr>
<tr>
<td>20-24</td>
<td>77.9</td>
<td>13.4</td>
</tr>
<tr>
<td>25-29</td>
<td>94.1</td>
<td>12.4</td>
</tr>
<tr>
<td>30-34</td>
<td>39.5</td>
<td>9.0</td>
</tr>
<tr>
<td>35-39</td>
<td>202.8</td>
<td>1.6</td>
</tr>
<tr>
<td>40-44</td>
<td>34.5</td>
<td>4.3</td>
</tr>
<tr>
<td>45+</td>
<td>12.8</td>
<td>0.4</td>
</tr>
<tr>
<td>Total</td>
<td>27.8</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Male and Female rates can be visually compared in the chart.
Top 5 Counties by reported Early Syphilis Infections:

- Essex
- Hudson
- Bergen
- Passaic
- Union
### Preliminary 2018 data

#### Table 1: STDs Reported Among New Jersey Residents, Year to Date (YTD)

<table>
<thead>
<tr>
<th>Reported Cases</th>
<th>DEC 2017</th>
<th>DEC 2018</th>
<th>YTD 2017</th>
<th>YTD 2018</th>
<th>YTD +/-</th>
<th>% YTD +/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>2,582</td>
<td>2,690</td>
<td>35,363</td>
<td>36,492</td>
<td>1129</td>
<td>3.2%</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>716</td>
<td>716</td>
<td>9,484</td>
<td>9,063</td>
<td>-421</td>
<td>(4.4%)</td>
</tr>
<tr>
<td>Teen CT/GC</td>
<td>815</td>
<td>788</td>
<td>10,906</td>
<td>11,159</td>
<td>253</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

**Syphilis**

<table>
<thead>
<tr>
<th>Type</th>
<th>DEC 2017</th>
<th>DEC 2018</th>
<th>YTD 2017</th>
<th>YTD 2018</th>
<th>YTD +/-</th>
<th>% YTD +/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>P &amp; S</td>
<td>37</td>
<td>34</td>
<td>502</td>
<td>558</td>
<td>56</td>
<td>11.2%</td>
</tr>
<tr>
<td>Early Latent</td>
<td>82</td>
<td>58</td>
<td>866</td>
<td>797</td>
<td>-69</td>
<td>(8.0%)</td>
</tr>
<tr>
<td>Late Latent</td>
<td>36</td>
<td>24</td>
<td>539</td>
<td>410</td>
<td>-129</td>
<td>(23.9%)</td>
</tr>
<tr>
<td>Congenital</td>
<td>~</td>
<td>~</td>
<td>13</td>
<td>13</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Unstaged Syphilis</td>
<td>~</td>
<td>9</td>
<td>40</td>
<td>40</td>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

Percentages in () denote a decrease in cases in 2018 compared to 2017.
Preliminary Trends

Data are expected to be finalized in the next 2 months
- Final data will be posted to NJ SHAD and presentation will be updated 😊

Primary and Secondary Syphilis (P&S) is up 71% among females: 34 cases in 2017 compared to 58 cases in 2018
- Congenital syphilis is steady at the moment: ~13 cases among 101,000+ live births!

30% of our P&S syphilis cases are co-infected with HIV

Early syphilis (P&S and Early Latent) are slightly down by ~13 over cases compared to last year
- Not sure if we are just better at documenting data and finding cases sooner
Field Work

- **Disease Intervention Specialists (DIS)**
  - Specialty trained staff who work to investigated reportable diseases, ensure the primary patient is treated, identify their sexual contacts, ensure they are tested/treated, and prevent spread of infection/reinfection.

- **Partner Services**
  - Working with the original patient known to be infected with a disease to find others who have been exposed and get them to testing/treatment.
  - State DIS do this for both HIV and Syphilis.
  - Work with local DIS, who have the same training, who do this for syphilis, and some gonorrhea and chlamydia reports.

- **Linkage to HIV care/relinkage to HIV care**
  - Working to ensure people living with HIV/AIDS are seeing the doctor regularly and assisting with getting people to a doctor when changes occur.

- **And so much more...**
  - Provider education, patient education, referral to other support services, supporting other outbreak investigations...
Request for Application Overview

STD Services are RFA’ing their STD and Federal money
- https://healthapps.state.nj.us/noticeofgrant/documents/DHST20SST_rfa.pdf

DHSTS seeks to support services to prevent the spread of STDs in New Jersey
- Disease Intervention Specialists (DIS) are able to talk conduct Partner Services with individuals who are diagnosed with STDs (mostly syphilis) to ensure the patient is properly treated and their partners are also confidentiality informed, tested, and treated.

- Safety net services for uninsured or underinsured women to ensure they are tested for STDs (mostly Chlamydia and Gonorrhea)
Table 1: Number of FTE DIS expected in budget based on Early Syphilis cases reported in 2017

<table>
<thead>
<tr>
<th>Early Syphilis Cases per year</th>
<th>Max DIS for expected work</th>
<th>Minimum Cases per month</th>
<th>Maximum Cases per month</th>
<th>Approx. Average Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>Maximum</td>
<td>0.25</td>
<td>2 cases</td>
<td>6 cases</td>
</tr>
<tr>
<td>25</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>130</td>
<td>0.5</td>
<td>6 cases</td>
<td>11 cases</td>
</tr>
<tr>
<td>130</td>
<td>250</td>
<td>1</td>
<td>11 cases</td>
<td>21 cases</td>
</tr>
</tbody>
</table>
Surveillance

- All STDs are reported by New Jersey law to the State
  - Odd: most communicable diseases are reportable to the local health departments

- Syphilis is complicated! Most doctors have never seen syphilis and get the test results confused
  - Surveillance staff (and DIS) are able to help doctors make the decisions on how to proceed and if the person requires investigation.

- Once positive for syphilis, can be positive for life (even though you don’t have the disease!)
  - Maintain a registry of all reported test results to know if someone is infected or not
  - Maintain a contact at every health department in the country (and Puerto Rico and Canada) to obtain syphilis histories when people move
    - Sometimes requires daily calls to NYC, Philadelphia, Pennsylvania and New York State and Florida...both taking their patients and giving ours!
  - Make that initial call to the provider to obtain information regarding treatment, risk, demographics, and HIV status, and sexual history.
Syphilis Registry

Once someone is positive for syphilis, they will most likely have positive tests for life

Health Departments across the country maintain syphilis registries with lab and treatment information that we are able to share with providers

Call **609-826-4869** and request a “syphilis record search”.
- If you know your patient just moved here, let us know where the patient lived before. We will call that state and get you the complete syphilis testing and treatment history
- Aids in knowing if additional treatment is needed
New Jersey State Health Assessment Data (NJSHAD)

https://www-doh.state.nj.us/doh-shad/home/Welcome.html

Ability to create reports by County or Municipality
  ◦ By disease, age group, gender, year
  ◦ Able to get case counts and rates

Will be maintained and updated with new data annually.
Thank you!

Greta Anschuetz, Director, STD Services: greta.Anschuetz@doh.nj.gov / 609-633-7692
Debbie Gleissner, Field Operations Mgr: Deborah.Gleissner@doh.nj.gov / 609-826-5958
General STD Line: 609-826-4869 (use for syphilis record searches/syphilis guidance