Healthy people living and playing in healthy communities
STIs in Marion County 2011-2015

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Overview

• Methodology
• Marion County and Oregon Data for:
  • Syphilis
  • Gonorrhea
  • Chlamydia
• Strategic Plan
• Resources

Sources:
Methods

- County data collected out of ORPHEUS (Oregon Public Health Epidemiologic User System)
  - This includes:
    - Provider data on “inadequate treatments” in gonorrhea cases
    - Risk factors (such as sexual orientation and app use)
    - Demographic information
- State data collected from Oregon Health Authority website
- National data collected from CDC 2014 STD Surveillance Report
- Geography:
  - Zipcodes combined into areas of statistical significance within local regions
  - Maps created in ArcGIS
- Data: Analyzed and cross-tabulated in STATA (statistical software)
- Incidence calculated as rate per 100,000

Sources: OHA, CDC, ARCGIS, STATA, ORPHEUS
United States experienced a 36% increase in incidence per 100,000 (from 14.8 cases per 100,000 in 2011 to 20.1 cases per 100,000 in 2014).

Marion County had a 538% increase in incidence per 100,000, (from 3.2 cases per 100,000 in 2011 to 20.4 cases per 100,000 in 2015).

Oregon has experienced a 134% increase in incidence per 100,000 (from 4.4 cases per 100,000 in 2011 to 10.3 cases per 100,000 in 2014).

Marion County had a 1138% increase in incidence per 100,000 (from 1.3 cases per 100,000 in 2011 to 16.1 cases per 100,000 in 2015).

Sources: ORPHEUS, OHA, CDC
Syphilis in Marion County 2015

- 66 cases: 82% men, 18% women
- Race/ethnicity:
  - 43% White
  - 36% Hispanic (75% increase in incidence since 2014)
- Age groups:
  - 23% 35-44 year age group
  - 33% 45-54 year age group
- Sexual orientation
  - 81% of cases identify as MSM
  - Increases in MSW and Women since 2014

Sources: ORPHEUS
Syphilis in Marion County 2015 cont.

- **20% Co-infection (2015)**
  - Defined as infection of chlamydia, gonorrhea, or hepatitis diagnosed within 1 month of syphilis diagnosis
  - 13% decrease since 2014
  - 26% HIV Co-infection (2015)
    - 11% decrease since 2014
- **25% Repeat infection (2015)**
  - 116% increase since 2014
- **Congenital syphilis:**
  - 160% increase (2011-2015)
  - 2 cases in Marion County so far in 2016
  - Oregon had 2 cases in 2014 and 6 cases in 2015

Sources: ORPHEUS
Marion County syphilis rates (all stages) by zip code, 2015

Sources: ORPHEUS Zip Code Data, ArcGIS
Syphilis: Trends in Mobile App Use

- 21% syphilis cases report using app
  - 134% increase in percent (2014-2015)

- 62% of syphilis cases among MSM report using app (2015)

- Presents new challenges for managing contacts

- Data were collected out of ORPHEUS risk factors section

Sources: ORPHEUS
United States has experienced a **7.2%** increase in incidence per 100,000 (103.3 cases per 100,000 in 2011 to 110.7 cases per 100,000 in 2014)

Oregon had a **51.7%** increase in incidence per 100,000, (from 38.5 cases per 100,000 in 2011 to 58.4 cases per 100,000 in 2014)

Marion County had a **205.9%** increase in incidence per 100,000, (from 25.5 cases per 100,000 in 2011 to 78.0 cases per 100,000 in 2015)

Sources: ORPHEUS, OHA, CDC
Gonorrhea in Marion County 2015

- 252 cases: 56% men, 44% women
- Race/ethnicity:
  - 53 % White
  - 18 % Hispanic
- Age groups:
  - 43% 35-44 year age group
Marion County gonorrhea rates, by zip-code, 2015

Sources: ORPHEUS Zip Code Data, ArcGIS
Gonorrhea screening and treatment practices in Marion County 2015

**Gonorrhea inadequate treatments:**

- Defined as treatment outside of the CDC recommendations (2015)
- Recorded by health department from ORPHEUS (ongoing surveillance by staff)

### Gonorrhea 2015 (n=252) vs. Gonorrhea Inadequate Treatment 2015 (18.7% of cases)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Provider Name</th>
<th>% of Cases</th>
<th>Rank</th>
<th>Provider Name</th>
<th>% of Inadequate Tx</th>
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<tbody>
<tr>
<td>1</td>
<td>MCHD</td>
<td>19.2%</td>
<td>1</td>
<td>B</td>
<td>17.0%</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>11.0%</td>
<td>2</td>
<td>K</td>
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<td>3</td>
<td>C</td>
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<tr>
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<tr>
<td>5</td>
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<td>6.8%</td>
<td>5</td>
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<td>J</td>
<td>2.3%</td>
<td>10</td>
<td>H</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

Graphic:
- Left hand side shows top 10 providers seeing gonorrhea cases in Marion County
- Right hand side shows top 10 providers recorded as inadequately treating gonorrhea cases
- Read as “Provider B sees 11% of all cases in Marion County, and is responsible for treating 17% of all recorded inadequate treatments in the county”

Sources: ORPHEUS
Neisseria gonorrhoeae, the bacterium that causes gonorrhea, has developed a resistance to nearly all of the antibiotics used to treat it. Starting in the 1980s, the Center for Disease Control was forced to rule out one antimicrobial after another as they became less and less effective in the treatment of gonorrhea.
United States experienced a 0.6% increase in incidence per 100,000 (453.4 cases per 100,000 in 2011 to 456.1 cases per 100,000 in 2014),

Oregon had a 10.5% increase in incidence per 100,000, (from 353.9 cases per 100,000 in 2011 to 390.9 cases per 100,000 in 2014)

Marion County had a 12.2% increase in incidence per 100,000, (from 471.0 cases per 100,000 in 2011 to 528.59 cases per 100,000 in 2015)
Chlamydia in Marion County 2015

- 1711 cases 28% men, and 72% women
- Race/ethnicity
  - 34% White
  - 26% Hispanic
- Age groups:
  - 66% 25 and under age group
Marion County Chlamydia incidence rate 2015

Incidence per 100,000

Sources: ORPHEUS Zip Code Data, ArcGIS
Next Steps

• Strategic Plan
  – Practitioner Outreach
  – Target Population Outreach
  – Community Outreach

• Internal Program Evaluation
Outreach Updates

• Practitioner Outreach
  – MCHD has reached 130+ practitioners in the community!
  – GC inadequate treatments appear to be on the decline

• Target Outreach
  – LGBTQ+ Forum complete
  – Hispanic/Latinx Forum coming soon

• Community Outreach
  – Salem Pride Event
  – Red Ribbon Show
  – More to come, determined by the forums
Gonorrhea inadequate treatment: Success story!

Marion County, percent of gonorrhea cases with inadequate treatment, 2015-2016 YTD

Percent of cases

Year

2015

2016 (1/1/2016-9/22/2016)

Sources: ORPHEUS
Questions?