Identifying Coinfection
a Public Health Approach

Tuberculosis
+
Cocci
No known disclosures or conflicts of interest

Surveillance Epi
Objectives

describe a public health approach to identifying persons with tuberculosis cocci comorbidity

identify TB-only & TB-Cocci differences
Public Health
TB Data

200+
2009-2016

Cocci

TB
~73,000
Camden, NJ

~1,750

2009-2016

TB

Cocci

http://theoldmotor.com/?p=162836
TB Cocci
Total TB
1,743

TB-Cocci
157

TB-only
1,586

9%
Annual count of TB-Cocci decreased faster than TB incidence.
What about Cx positivity?
TB-Cocci is less likely to be Cx(+), right?

There is **NO difference** in MTB Cx(+) & Cx(-) between **TB-Cocci** and **TB-only** persons.

<table>
<thead>
<tr>
<th>Group</th>
<th>Cx(+)</th>
<th>Cx(-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB-Cocci</td>
<td>77%</td>
<td>23%</td>
</tr>
<tr>
<td>TB-only</td>
<td>78%</td>
<td>22%</td>
</tr>
</tbody>
</table>

p-value 0.89
What about country of birth?

**TB-Cocci** persons were **more likely** to be **US-born** compared to **TB-only**.

- **TB-Cocci**: 40% (US-born) vs 60% (Foreign-born)
- **TB-only**: 30% (US-born) vs 70% (Foreign-born)

*p-value 0.006*
How does Completion of Tx look?

Completed TB Tx was higher for persons with TB-Cocci compared to TB-only.

- TB-Cocci: 88% (5% Other, 6% Died)
- TB-only: 81% (13% Other, 6% Died)

p-value 0.018
Cavitary chest imaging was more likely in TB-Cocci persons compared to TB-only.

- TB-Cocci: 43% vs. 57%
- TB-only: 32% vs. 68%

p-value: 0.005
Miliary Chest Imaging

Miliary chest imaging was more likely in TB-Cocci persons compared to TB-only.

<table>
<thead>
<tr>
<th></th>
<th>TB-Cocci</th>
<th>TB-only</th>
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</thead>
<tbody>
<tr>
<td>Frequency (%)</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>Imaging (%)</td>
<td>90%</td>
<td>96%</td>
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</tbody>
</table>

p-value 0.002
Lastly, time between TB & Cocci work-up
50% of TB-Cocci worked-up ≤30-days