Quantiferon Testing in Community School Contact Investigations

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Montgomery County, Department of Health and Human Services
Tuberculosis Control and Refugee Health Program
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## Background Information

<table>
<thead>
<tr>
<th>SETTING</th>
<th>PUBLIC MIDDLE SCHOOL</th>
<th>PUBLIC HIGH SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total # Students</strong>*</td>
<td><code>800</code></td>
<td><code>1, 400</code></td>
</tr>
<tr>
<td><strong>Demographics</strong>*</td>
<td>39% Hispanic, 14.5% ESOL</td>
<td>35% Hispanic, 7.7% ESOL</td>
</tr>
<tr>
<td><strong>Index Case</strong></td>
<td>13 years of age; Peru; infectiousness; smear status; positive PPD; entered U.S. 1/10/2014</td>
<td>17 years of age; Peru; infectiousness; smear status; positive QFT; entered U.S. 2/18/2012</td>
</tr>
<tr>
<td><strong>School Contacts Identified</strong></td>
<td>Yes-students, teachers, bus drivers</td>
<td>Yes, -students, teachers</td>
</tr>
<tr>
<td><strong>Special Considerations</strong></td>
<td>School uses a 7-class period schedule; primarily in class with the same group of students throughout the school day; average-sized classes; public school bus</td>
<td>ESOL student; primarily shared class time and activities with the same group of students throughout the school day; smaller than average-sized classes; family drives to school</td>
</tr>
</tbody>
</table>

*http://www.montgomeryschoolsmd.org/departments/sharedaccountability/glance/
Contact Investigation: Screening Options

- Tuberculin Skin Test (TST)
- Quantiferon (QFT)
Screening Tool Selection

• Population
• Resources
• Support
  – Department of Health and Human Services (DHS)
  – DHMH Public Health Laboratory (PHL)
  – Montgomery County Public Schools (MCPS)
• Feasibility
  – Staff
    • Availability
    • Skills
    • Experience
• New Approach
External Collaborative Partners

- Maryland Center for Tuberculosis Control and Prevention Team (CTBCP)
- Maryland DHMH Laboratory (PHL)
- Montgomery County Public Schools (MCPS)
- Local School Site Administration
- Qiagen
- Maryland Tuberculosis Control Program

Jurisdictions
Internal Collaborative Partners

• Montgomery County DHHS
  – Public Health Officer
  – Communicable Disease & Epidemiology Senior Administrator
  – Epidemiologist
  – Public Information Officer
  – Tuberculosis Control Program Team
  – Immunization Program Team
  – School Health Services Team
  – Emergency Preparedness Team
Communication with the School Community

• School Administration and Staff
  – Initial meeting with leadership
  – Principal
  – Letters
    • Fact sheets
    • Options
    • Contact information
  – Phone
  – Face to face

Communication, cont’d

• Parents and Students
  – Principal
  – Letters
    • Fact Sheets
    • Options
    • Contact Information
  – Face to face
  – Connect Ed
Logistics

- Incident Command Services (ICS)- Like Model
  - Task specific staff assignment
  - Skills and ability
  - Structured work flow
  - Focus on efficiency (estimate length of time for each blood draw)
Logistics

• Preparation
• Initial meeting with site administration
• Site visit by logistics team
• Location at site
• Set-up design
• Supplies
• Documentation
Logistics

• Consent
  – Forms with signature
  – Phone

• Communication of Results

• Follow up with parents and students
# Successes and Challenges

<table>
<thead>
<tr>
<th>What Worked Well</th>
<th>What Were Some Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
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</tr>
<tr>
<td>ICS</td>
<td>Space/Lighting</td>
</tr>
<tr>
<td>Coordination</td>
<td>Resources</td>
</tr>
<tr>
<td>Planning and training</td>
<td>Consent</td>
</tr>
<tr>
<td>Communication</td>
<td>Follow up</td>
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<tr>
<td>Logistics</td>
<td>Supervision</td>
</tr>
<tr>
<td>Specimen integrity and transport</td>
<td>Emergency plan</td>
</tr>
<tr>
<td>Understanding School policy and guidelines</td>
<td>Snacks/water</td>
</tr>
<tr>
<td>92% tested at HS</td>
<td>76% tested at MS</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Media coverage</td>
</tr>
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# Outcomes

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<tr>
<th>Outcome</th>
<th>Public Middle School</th>
<th>Public High School</th>
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<tbody>
<tr>
<td># Identified</td>
<td>196</td>
<td>149</td>
</tr>
<tr>
<td># Screened (single-round)</td>
<td>156</td>
<td>143</td>
</tr>
<tr>
<td># Positive</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td># Foreign-born Positive</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td># Completed TLTBI</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td># Declined TLTBI (total)</td>
<td>1</td>
<td>2</td>
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<td>Percent of Identified</td>
<td>76% Tested</td>
<td>92% Tested</td>
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<tr>
<td>Tested/Evaluated</td>
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Recommendations

- Screening tool selection
- ICS model
- Resources and support
- Communication
- Collaboration
- Preparation
- Consent
- Specimen transport
- Biohazard waste disposal
- Plan for the unexpected!
- Flexibility
- Consider population
Thank You!

- Please use the microphone when asking questions