Tuberculosis Epidemiologic Studies Consortium (TBESC) Update

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Prevention and Health Promotion Administration
Center for TB Control and Prevention
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MISSION AND VISION

MISSION
The mission of the Prevention and Health Promotion Administration is to protect, promote and improve the health and well-being of all Marylanders and their families through provision of public health leadership and through community-based public health efforts in partnership with local health departments, providers, community based organizations, and public and private sector agencies, giving special attention to at-risk and vulnerable populations.

VISION
The Prevention and Health Promotion Administration envisions a future in which all Marylanders and their families enjoy optimal health and well-being.
Reported Tuberculosis (TB) Cases and Rates
United States, 1993–2017
• Partnership of CDC Division of TB Elimination (DTBE) with TB control programs and academic institutions in 11 states

• TBESC-II: Striving to Prevent, Control, and Eliminate Tuberculosis (2011-2021)

• Strategies to improve diagnosis and treatment of LTBI in high-risk individuals
# Maryland TBESC Staff

<table>
<thead>
<tr>
<th>Study Nurse Coordinators</th>
<th>Other Study Staff</th>
<th>Maryland TBESC Site Manager and Epidemiologist</th>
<th>Co-Principal Investigators</th>
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<tr>
<td>Gina Maltas</td>
<td>Samuel Holzman</td>
<td>Alexandra Pyan</td>
<td>Maunank Shah</td>
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<td>Bee Munk</td>
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<td>Paul Saleeb</td>
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Summary of TBESC-II Activities

• **Part A** – Prospective comparison of TST, QFT-GIT, and T-SPOT for diagnosis of LTBI and predicting disease progression (Baltimore City, Baltimore County, Montgomery County)

• **Part B** – Describe and quantify LTBI Cascade (Baltimore City and Baltimore Counties)
  - **January-June 2017**: LTBI activities in two LHDs
  - **Fall 2017 - early 2018**: LTBI activities with community providers serving high risk populations

• **Part C** – LTBI implementation research in 2 community clinics

• **Part D** – TBTC Study 37, a clinical trial of 6-week regimen of daily, self-administered rifapentine
USPSTF Recommendation (2016)

• Screen for latent TB infection in asymptomatic individuals at increased risk for tuberculosis infection

Contacts Non-US-Born Medical risks
Part B. TB Prevention Cascade to Cure
Part B: Latent Tuberculosis Infection
Cascade to Cure

• Local health departments: Baltimore City and Baltimore County

• Community Clinics serving High Risk Populations
  - St. Clare Medical Outreach, UM St. Joseph Medical Center) (community clinic)
  - Chase Brexton Health Care (FQHC)
  - CCI Health and Wellness Services (FQHC)
  - University of Maryland Baltimore County (UMBC) (student clinic)
  - Towson University (student clinic)
Part B: Maryland Sites

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<tr>
<th>Status</th>
<th>Non-US-Born</th>
<th>US-Born</th>
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<tr>
<td>Positive test</td>
<td>156</td>
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<tr>
<td>LTBI diagnosis/No TB</td>
<td>139 (89%)</td>
<td></td>
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<tr>
<td>LTBI tx offered</td>
<td>125 (90%)</td>
<td></td>
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<tr>
<td>Started LTBI tx</td>
<td>104 (83%)</td>
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<tr>
<td>Completed LTBI tx</td>
<td>60 (58%)</td>
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- LTBI: Latent Tuberculosis Infection
Part B: All US Sites

- Positive test: 3361
- LTBI diagnosis/No TB: 2933 (87%)
- LTBI tx offered: 1475 (50%)
- Started LTBI tx: 1162 (79%)
- Completed LTBI tx: 893 (74%)

Non-US-Born | US-Born
--- | ---
3361 | 2933 (87%)
1475 | 1162 (79%)
893 | 893 (74%)
Things to consider for LTBI services in Community Clinics in MD

- Country of birth commonly unavailable
- Screen high risk populations only
- Need for improved monitoring and follow-up for anyone with a positive test through to treatment completion
- Treatment completion: Need to be able to capture treatment outcomes from EMR data extraction
Part C: Closing the Gaps in the TB Prevention Cascade

• Partner with 2 community clinics (St. Clare, Esperanza) serving large population of non-US-born individuals
• Quantify current levels of LTBI testing and treatment at partner clinics
• Identify barriers to scale-up of LTBI testing and treatment
  • Baseline provider surveys
  • In-depth interviews with providers, clinic leadership, support staff
• Focus group discussion with providers and clinic leadership to discuss potential interventions addressing the identified barriers to LTBI testing and treatment
• Study approved by CDC IRB; awaiting local IRB approvals
Part D: Safety, Tolerability, and Effectiveness of 6 Weeks of Daily Rifapentine

- LTBI with increased risk for disease progression, including HIV
- Control arm: 12-16 weeks of rifamycin-based regimen (3HP, 4R, 3HR)
- 2 year follow-up
- Baltimore City Health Department, Montgomery County Health Department—Dr. Mohan Amlani
- Approved by CDC and local IRBs
Maryland Department of Health
Prevention and Health Promotion Administration

https://phpa.health.maryland.gov