Immigrants and TB
TB Classes and Wisconsin

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Disclosures

• None
Objectives

- Describe Overseas Medical TB Screening
- Understand B1/B2 TB Status
- Describe Role of Public Health in Screening B1/B2
- Wisconsin’s B1s and B2s
Overseas Medical Screening

- Screening of all refugees and immigrants required by law
  - Done by “panel physicians”

- Purpose is to detect diseases which would prevent entrance to the United States

- Standards for screening are set by the CDC in technical instructions
TB Screening with TI 2007

- In countries with <20 cases per 100,000 of TB
  - Age 15 and Older
    - Medical History/Physical exam, CXR
  - If suggestive of TB or HIV infection then, three sputum smears and cultures
TB Screening with TI 2007

- In countries with ≥20 cases per 100,000 of TB
  - Age 15 and Older is the same

- Age 2-14
  - Medical History and Physical Exam as well as a TST or IGRA.
  - If either are positive requires a CXR and then possibly sputum samples.
TB Classes

- Class A - Active TB disease, would need waiver to allow travel, so uncommon

- Class B1 - Evidence of TB disease, sputum smear negative. This includes old, healed TB as well as previously treated TB. Most numerous status for WI arrivals

- Class B2 - LTBI, individual had a positive (>10mm) TST or IGRA and normal CXR. BCG is not taken into account.

- Class B3 - Contact to a known TB case
Role of Public Health in Screening TB Immigrants

- When an individual with a TB status enters the U.S. the jurisdiction they are entering is notified by the CDC.

- In WI, the TB Program is notified, a file is created in WEDSS and then the LHD is notified.

- Post-Arrival screening is recommended by CDC to be initiated within 30 days of arrival to the U.S. and completed within 90 days.
Follow-up Based on TB Classes

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<thead>
<tr>
<th>Arrival’s Class Status</th>
<th>TB Follow-up Recommendations</th>
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<tbody>
<tr>
<td>No TB Class – Refugee Arrivals</td>
<td>Evaluate for signs and symptoms that may have developed since the overseas exam.</td>
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<tr>
<td>(TB follow-up for immigrants with no TB class is not required.)</td>
<td>A chest x-ray (CXR) should be performed for those who have signs or symptoms compatible with TB disease, regardless of absence of TB class OR pending TST or IGRA.</td>
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<td>Administer a Mantoux tuberculin skin test (TST) or an interferon-gamma release assay (IGRA) such as QuantiFERON-TB for all individuals, regardless of BCG history, unless they have a documented previously positive test. Pregnancy is not a medical contraindication for TST testing or for treatment of active or latent TB. A TST administered prior to 6 months of age may yield a false negative result, and should be repeated after age 6 months if the infant is at risk of TB.</td>
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<td>A CXR should also be performed for all individuals with a positive TST or IGRA test.</td>
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<td>Class A TB – Active pulmonary TB disease, sputum smear - positive; requires a waiver (i.e., on treatment and smear-negative prior to travel).</td>
<td>Consider this patient to have active TB disease (suspected or confirmed).</td>
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<td>Perform a stateside chest x-ray (CXR).</td>
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<td>Assess the patient clinically and perform additional diagnostic testing, such as sputum collection, if indicated.</td>
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<td>Review overseas medical exam documentation.</td>
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<td>Continue or revise treatment regimen, as indicated.</td>
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<td>Immediately report a case of active TB disease to Wisconsin TB Program by calling (608) 261-6319.</td>
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<td>Directly observed therapy (DOT) is the standard of practice for persons with TB disease.</td>
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**Follow-Up Continued**

| Class B1 TB – Evidence of pulmonary or extrapulmonary TB disease, sputum smear-negative; includes “old healed TB” and previously treated TB. | Do a chest x-ray (CXR) regardless of pending TST/IGRA result.  
- Evaluate for signs and symptoms that may have developed since the overseas exam.  
- Administer a Mantoux tuberculin skin test (TST) or an interferon-gamma release assay (IGRA) such as QuantiFERON-TB, regardless of BCG history, unless they have a documented previously positive test.  
- Do additional tests (e.g., sputa for AFB, etc.), as indicated, to determine TB diagnosis (i.e., latent TB infection [LTBI] or active TB disease). |
|---|---|
| Class B2 TB – LTBI (TST ≥ 10 mm) | Consider this patient to have LTBI. Evaluate for signs and symptoms that may have developed since the overseas exam.  
- Perform an interferon-gamma release assay (IGRA) such as QuantiFERON-TB if the patient is at risk for LTBI AND refuses treatment, saying that the TST was positive solely due to BCG immunization in his/her home country. No further TST or IGRA is needed if the patient is willing to be treated for LTBI.  
- A chest x-ray (CXR) should be performed for those who have signs or symptoms compatible with TB disease, regardless of any repeat TST or IGRA you may think is indicated to confirm or rule out overseas TST results  
- It is the standard of practice in the United States to offer treatment for LTBI. A stateside CXR and medical evaluation must be done before initiating LTBI treatment. |
| Class B3 TB – TB contact | Administer a Mantoux tuberculin skin test (TST) or an interferon-gamma release assay (IGRA) such as QuantiFERON-TB for all individuals, regardless of BCG history, unless they have a documented previously positive test. Pregnancy is not a medical contraindication for TST testing or for treatment of active or latent TB. A TST administered prior to 6 months of age may yield a false negative result.  
- A chest x-ray (CXR) must be performed for all individuals with a positive TST or IGRA test and those who have symptoms compatible with TB disease, regardless of the TST or IGRA result. |
2014 TB Class Entering Wisconsin - 2014

- Class A 0 people
- Class B1 143 people
- Class B2 60 people
- Class B3 1 person

Pie chart showing:
- Class A: 1% of total
- Class B1: 29% of total
- Class B2: 70% of total
Importance of Screening

• Post-arrival screening for TB provides an opportunity to follow-up with new arrivals and to treat individuals with LTBI.

• Screening can also help to catch cases of active TB which were missed or manifested since the pre-immigration screening.
  • In a study in Baltimore, 4% of B1s screened were diagnosed with active TB and 53% with LTBI
  • Wisconsin data unavailable, but cases have been found!