Contact Investigation in Congregate Settings
Principles and Policies

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Definition of a Congregate Setting

• Congregate setting is defined as an environment where a number of people meet or gather and share the same space for a period of time

• Examples - jail, prison, shelter, workplace, school, child care center, nursing home, social club, rehabilitation facility, residential living or treatment facility
Congregate Setting Assessment

• First step in a contact investigation in a congregate setting is an assessment

• The assessment can be valuable in identifying additional potential contacts who may have been exposed to the index case

Effect of the Assessment on the Index Case

• Congregate setting assessments and investigations can be VERY difficult for the individual diagnosed with M.Tb.

• These assessments commonly elicit fear of stigma is a social, school or residential setting, or loss of employment in a workplace

• This fear can be real and should not be disregarded in the decision to perform congregate site assessments
Polling Question

What is the main objective of a congregate site assessment?

• Identify potential contacts in the congregate setting
• Get to know the worksite and provide education
• Minimize anxiety
• Assess risk of transmission

Objectives of a Congregate Site Assessment

• Meet with appropriate authorities to identify potential contacts in the congregate setting
• Provide education to authorities and potential contacts in the congregate setting
• Minimize anxiety due to TB exposure
Objectives of a Congregate Site Assessment - 2

• Assess the risk for TB transmission and the individual risk of contacts for progression to TB disease

• Build credibility and maintain control over the evaluation process by using sound public health practice – identify those contacts at highest risk for exposure and proceed to low risk contacts ONLY if results indicate the necessity to do so

Required Congregate Setting Assessments

• Child care or school setting
  – serving infants and /or children ≥5 years of age whenever the index case is infectious or potentially infectious
  – A congregate site assessment must occur regardless of the risk for transmission of the index case

• Schools, elementary and secondary, whenever the index case is at high risk for transmission
• Congregate living facilities
  – Whenever the index case is or was an employee or volunteer during his/her infectious period AND the facility serves a vulnerable resident population, regardless of the risk of transmission

• Congregate living facilities
  – Whenever the index case is or was a resident at any time during his/her infectious period, regardless of the risk for transmission

• Local Jails
  – Whenever the index case is a current or former inmate or employee who was incarcerated or employed at any time during his/her infectious period and is deemed to be at high risk for transmission
Clinical Findings That May Warrant Expanding to a Congregate Site Assessment

• Persons with suspected or confirmed potentially infectious TB in a congregate setting at any time during their infectious period with one or more of the following characteristics:
  – Laryngeal TB
  – Sputum smear positive pulmonary TB
  – Cavities on chest x-ray or CT scan-
  – History of cough or hemoptysis, OR
  – Pulmonary or extra-pulmonary TB in children <5yrs or age for identification of the source case

Clinical Findings That May Warrant a Congregate Site Assessment - 2

• Congregate site assessments should not be routine

• Assessments should only be performed if one or more of the conditions justifying a congregate site assessment are met

• These conditions require household and social contacts be identified and evaluated before a congregate site assessment occurs
Additional Justifications for a Congregate Site Assessment

• Congregate site assessments are justified when at least one of the following criteria is met during the testing and evaluation of household and social contacts, regardless of the risk of transmission of the index case:

1. Additional suspected or confirmed TB cases are identified among household or social contacts

2. The rate of infection among household and social contacts is above 10% for U.S. born contacts or 35% for foreign-born contacts

3. LTBI is identified in any U.S. born child sharing a residence with a foreign-born index case so long as the child has no history of previous TB exposure or travel outside the U.S.

4. No contacts are identified outside the congregate setting

5. A child <5 yrs. of age with suspected or confirmed pulmonary or extra-pulmonary TB disease, with no potential source case, is identified in the household or immediate family who is cared for by a licensed or unlicensed daycare center
Confidentiality

• Disclosure of the index case is frequently necessary to assess the exposure for potential contacts
  – Authorities within the congregate setting often need to assist the investigator to determine individuals shared the same air space with the index case and for what period of time

  The disclosure of the name of the index case should be given **ONLY** to the person or persons assisting in the site assessment

Confidentiality - 2

• The index case **must** be told about the need or potential need to disclose his/her identity **prior** to any visit to the congregate site

• The individual(s) to who you disclose the identity of the index case **must** be informed of their obligation to keep this information confidential from other persons in or outside of the congregate setting and from any inquiries by the media
Essential Forms

• Several forms have been developed to assist the health care worker determine and document the infectiousness of the TB patient, the risk of transmission in a congregate setting, and determine who should be tested for LTBI

• These forms are in the New Jersey Department of Health, Practice Standards for Contact and Source Case Investigations

Essential Forms - 2

• Pre-Interview Chart Audit Tool, Appendix 4
  • This form should be used prior to the TB interview to obtain and document background information regarding the patient and nature of the illness
  • Essential for a more effective interview and determination of the infectious period

• Patient Assessment Form (PAF), Appendix 5
  • This form should be used obtain and document risk factors for TB disease, demographic, social, and travel history, and determine extent and duration of symptoms
  • Essential to establish the beginning of the infectious period
Essential Forms - 3

• **TB Index Case Assessment Form, Appendix 1**
  - This form should be used to determine and document the infectiousness or potential infectiousness of the patient.
  - It is based on a combination of four factors – site of disease, sputum smear results, chest x-ray or CT scan findings, and symptoms.
  - Results in a designation of high or low risk for transmission.
  - These risk designations for the index case will facilitate an exposure assessment for all potential contacts.

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**TB INDEX CASE ASSESSMENT FORM**

**RISK FOR TRANSMISSION**

This form must be completed for each index case to determine the risk for transmission.

<table>
<thead>
<tr>
<th>Characteristics of the Index Case</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteriology, if done (circle the highest scoring applicable option only)</td>
<td></td>
</tr>
<tr>
<td>Sputum smear (+) for AFB</td>
<td>10</td>
</tr>
<tr>
<td>Sputum smear (−) for AFB</td>
<td>10</td>
</tr>
<tr>
<td>Smear (+) for AFB from respiratory source other than sputum</td>
<td>8</td>
</tr>
<tr>
<td>Smear (−) culture positive for AFB from any respiratory source</td>
<td>3</td>
</tr>
<tr>
<td>Smear (−) culture pending or culture negative from any respiratory source</td>
<td>0</td>
</tr>
<tr>
<td>Clinical case definition, pulmonary TB</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Radiology (circle only one applicable option)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cavitary on CXR or CT scan</td>
<td>5</td>
</tr>
<tr>
<td>Noncavitary, abnormal CXR consistent with TB</td>
<td>2</td>
</tr>
<tr>
<td>Normal</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Symptoms (circle only one applicable option)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of cough and/or hemoptysis</td>
<td>5</td>
</tr>
<tr>
<td>No history of respiratory symptoms</td>
<td>0</td>
</tr>
</tbody>
</table>

**Total** for applicable index case characteristics (Add all circled scores above that are applicable to the index case in question) =

**Findings**

- [ ] High Risk for Transmission (Total 10 – 20)
- [ ] Low Risk for Transmission (Total 01 – 09)
- [ ] Risk Does Not Warrant Contact Investigation (Total <03)

Signature of staff completing assessment: __________________________ Date: __________________________

The findings of this assessment will be used to complete the Exposure Assessment Worksheet for persons exposed to this index case.
Essential Forms - 4

• *Exposure Assessment Worksheet - Appendix 7 and Guidelines for Completing the Exposure Assessment Worksheet – Appendix 8*
  
  – This form should be used to determine and document if an exposed individual is a contact based on the risk for transmission by the index case and specific characteristics of exposure
  
  – The Worksheet is mandatory for use in congregate settings, but may be used to assess the exposure of all contacts who do not share a residence with the index case
  
  – The Worksheet is not intended to limit the availability of testing for LTBI to any additional individuals that a health care worker with experience in contact investigations may deem at high risk for infection due to exposure

Conclusion

• The decision to conduct a congregate setting investigation is based on principles and practices of contact investigations
  
  – Typically, every person exposed to a potentially infectious index case should NOT be classified as a contact
  
  – Every person classified as a contact is NOT at equal risk for acquisition of LTBI
  
  – An effective contact investigation does NOT necessarily test every identified contact for the presence of LTBI. This is especially true in congregate settings

• The decision to conduct a congregate site assessment is not a decision to test for LTBI in that setting