TB Contact Investigation Overview

CAN YOU IMAGINE A WORLD WITHOUT TB?
WE CAN.

Stop TB Partnership, stoptb.org

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Objectives

• Identify goals of a TB contact investigation
• Identify when to initiate and expand a TB contact investigation
• Know the resources available in AZ for TB contact investigations
Contact Investigations

• On average, 10 contacts are identified for each person with infectious TB in the U.S

• 20%–30% of all contacts have LTBI

• 1% of contacts have TB disease

• Of contacts who will ultimately have TB disease, approximately one-half develop disease in the first year after exposure
Goals for Contact Investigations

• Interrupt further transmission
  – Identify additional cases
  – Identify LTBI

• Identify settings with high risk and apply effective infection control measures
Role of the local health department (LHD)

• Health department conducts all local CIs

OR

• Ensure CIs conducted by other organizations/facility are done according to CDC guidelines
When to Begin a CI

• NOT ALL ACTIVE TB CASES REQUIRE A CI
• Must decide which cases to investigate
• Decision depends on *several factors* which indicate likelihood of transmission
• Once begun, assign CIs a high priority
About the MMWR for Contact Investigation

• MMWR on December 16, 2005

• QuantiFERON® -TB Gold Test guidelines in same issue
**Decision to Initiate Investigation**

- **Site of disease**
  - Pulmonary/laryngeal/pleural
  - Pulmonary suspect (tests pending, e.g., cultures)
  - Non-pulmonary (pulmonary and laryngeal involvement ruled out)

- **AFB** sputum smear positive
  - NAA¹ positive or not performed
    - Contact investigation should always be initiated
  - NAA negative⁷
    - Contact investigation not indicated
  - Cavitary disease
    - Contact investigation should always be initiated if sufficient resources
  - Abnormal CXR³ non-cavitary consistent with TB
    - Contact investigation should be initiated if sufficient resources
  - Abnormal CXR not consistent with TB
    - Contact investigation should be initiated only in exceptional circumstances

- **AFB** sputum smear negative or not performed

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*Acid-fast bacilli*

†Nucleic acid assay

§Approved indication for NAA

¶Chest radiograph
Factors for Assigning Contact Priorities

- Characteristics of the index patient
- Characteristics of contacts
  - Age
  - Immune status
  - Other medical conditions
- Exposure or likelihood of infection
Which Contacts Should be Given High Priority for TB Assessment?

• Are exhibiting TB symptoms

• Are at risk for developing TB disease if infected with *M. tuberculosis*
  – Less than 5 years of age
  – Weakened immune system (e.g., HIV)

• Had the most exposure (as defined by that investigation)
Testing and Treatment of Identified Contacts

• Evaluation
  – Symptoms review
  – Face to face assessment
  – TST or CXR
  – HIV testing recommended

• Treatment
  – LTBI
  – Window Treatment
When Should We Expand an Investigation?

- Unexpected large positivity rate
  - >10% community rate
- Evidence of secondary transmission
- Program objectives achieved

Expand to low priority contacts 8-10 weeks after last exposure.
CDC TB Website

- [www.cdc.gov/tb/](http://www.cdc.gov/tb/)
Welcome to the TB 101

This course is designed to educate health care workers about basic TB concepts related to TB prevention and control in the United States.

To view a brief overview of the course, including course objectives and continuing education information, please see additional course information.

To begin a lesson, click on one of the lesson topics on the right or click the "NEXT" button. It is recommended that you complete lessons in numerical order.

Acknowledgements
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- Curry International Tuberculosis Center
  www.currytbcenter.uchsc.edu
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  www.heartlantb.org
- New Jersey Medical School Global Tuberculosis Institute
  www.umdnj.edu/globaltb/home.htm
- Southeastern National Tuberculosis Center
  http://snrcmedicine.ui.edu

Lessons 1-3

Lesson 1: Introduction
Lesson 2: TB Transmission and the Development of TB Disease
Lesson 3: Testing for TB Infection

Lessons 4-6

Lesson 4: Diagnosis of TB Disease
Lesson 5: Treatment of Latent TB Infection
Lesson 6: Treatment of TB Disease
Welcome!

Heartland National TB Center (HNTC) is one of four Regional Training and Medical Consultation Centers in the United States funded by the Centers for Disease Control and Prevention (CDC), Division of TB Elimination.

Our Partners

- The University of Texas Health Science Center at Tyler (UTHSCT)
- Texas Center for Infectious Disease

News

- NEW! The Federal Custody from the Federal Bureau of Prisons, United States Marshals Service and Immigration & Customs Enforcement has released the TB Case Management for Removable Alien Inmates/Detainees in Federal Custody. The files are available for download below.
  - PDF Online Version
  - PDF Print Version

more »
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