

Contact Investigations for Tuberculosis-Part I

Sponsored by

Michigan Department of Community Health

American Lung Association of Michigan

Objectives

- Define contact investigation (CI)
- Describe the purpose of the CI and its importance for preventing transmission
- Describe when a CI should be conducted and how it should be prioritized
- Describe communication techniques which will be helpful in the TB interview

Contact Investigation Defined

A procedure for identifying contacts; people exposed to someone with suspected or confirmed pulmonary TB disease, screening those individuals for TB infection and disease, and providing appropriate treatment

Importance

- CDC estimates that 9 contacts are identified for every verified pulmonary and laryngeal TB case in the US. Of those:
 - 25-30% are infected with TB
 - 1% of infected contacts have already progressed to TB disease
 - 10% of newly infected contacts will develop TB disease-5% within 2 years
 - Contacts coinfecting with HIV have a 7-10% chance per year over a lifetime for developing TB disease

National Objectives

- Contacts will be identified for 90% of newly reported sputum smear positive cases
- 90% of contacts will be evaluated for infection and disease
- 85% of infected contacts who are started on treatment for LTBI will complete therapy
- 75% of treated contacts who complete treatment for latent infection

Contact Follow-up on ARPE Report Michigan, 2004

	Sputum smear +	Sputum smear -, cult +
Cases for investigation	83	44
Number of contacts/case	17.3	5
Evaluation rate	76%	75%
TB disease rate	1%	1%
LTBI rate	15%	26%
-tx rate	71%	52%
-completion rate	50%	59%

An iceberg floating in the ocean. The tip of the iceberg is above the water line and is labeled 'Active TB Disease'. The much larger part of the iceberg is submerged below the water line and is labeled 'Latent TB Infection'. A ship is visible on the right side of the water. The entire scene is enclosed in a circular frame with a dark blue border.

Active
TB Disease

Latent TB
infection is
the source
of most
future TB
disease

Latent
TB Infection

Opportunity Missed

- *All* cases of Tuberculosis were once contacts.

TB Control Priorities

- Cases
 - Identifying and treating persons who have active disease
- Contacts
 - Finding and screening contacts of active cases to determine whether they are
 - Infected or
 - Have active disease
 - Providing appropriate treatment

TB Control Priorities

- Screening Risk Groups
 - Screening populations at high-risk for TB infection and disease to detect infected persons, and providing therapy to prevent progression to active TB

Prioritizing Contact Investigations

- Priority One
 - Pulmonary or laryngeal disease with +smear
 - Disease in children
 - Pulmonary disease with HIV
- Priority Two
 - Pulmonary disease diagnosed clinically/no microscopy
 - Significant tuberculin reaction or recent conversion in children
 - Pulmonary disease with – smear/+ culture
- Priority Three
 - Extrapulmonary disease only if there is aerosolization

Contact Investigation Steps

- Establishing Investigational Priorities
 - Priorities for index case based on characteristics
 - Priorities for contacts
 - Age
 - Immune status
 - Other medical conditions
 - Exposure
 - Contacts who are HIV infected or are young children receive highest priority!!!

Prioritizing Exercise

Small Groups

**“Contact investigations are
to be active and imaginative,
Sherlock Holmes pursuits.”**

David Glasser, MD

May, 1974

Interview Defined

An interview is an individualized *exchange* of information

Information flow is two way

A dialogue – not a monologue

Open Ended Questions

- Require more than one-word response to promote dialogue
- Classic question starters are:
 - Who
 - What
 - Where
 - When
 - Why
 - How

Open Ended Questions

- Questions such as:
 - Do you visit anyone?
 - Do you have friends and family?
- Would be better as:
 - Tell me about your hobbies and activities.
 - Who are your friends and family?

Close Ended Questions

- To guide a conversation in a useful direction
- Can provide a challenge to the client through assumptions and reinforcement
- Provide quick summation

Interviewing Techniques

- Focused questions-provide limits or boundaries
- Paraphrasing-rewording response to verify information and show active listening
- Reflection-rewords a response to include emotional response
- Summarizing-rephrasing a series of responses to verify information and show active listening

Interviewing Techniques

- Ask/look for patient feedback (body language, questions, need for clarifications)
- Explain why certain questions are asked especially sensitive questions
- Be open to patient's own explanations/beliefs of illness
- Be aware of illness experience
- Avoid use of medical terminology
- Use open-ended questions as dialogue permits

Health Education

- Why must we do health education?
 - Vestment in treatment
 - Trusting relationship
 - Accountability for health decisions
 - Health care team included patient
 - Informed consent

Cultural Competency

- Health care workers should be aware of cultural diversity in everyone, but not necessarily the stereotypes

- Diversity categories

Geography

Culture

Gender

Spirituality

Language

Disability

Sexuality

Age

Culture Can Affect the Following

- Experience of psychological distress
- Description of symptoms of distress
- Communication about distress and its symptoms
- Attribution of illness source
- Attitudes towards helpers
- Expectations for treatment



Interviewing Skills Exercise

Small Groups