

# Fundamentals of a Contact Investigation-Part I

...so many questions to answer

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# Complex Questions

- Who is suspect?
- Infectiousness?
- Which contacts to evaluate?
- Where do I start?
- So many questions to answer!



# 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

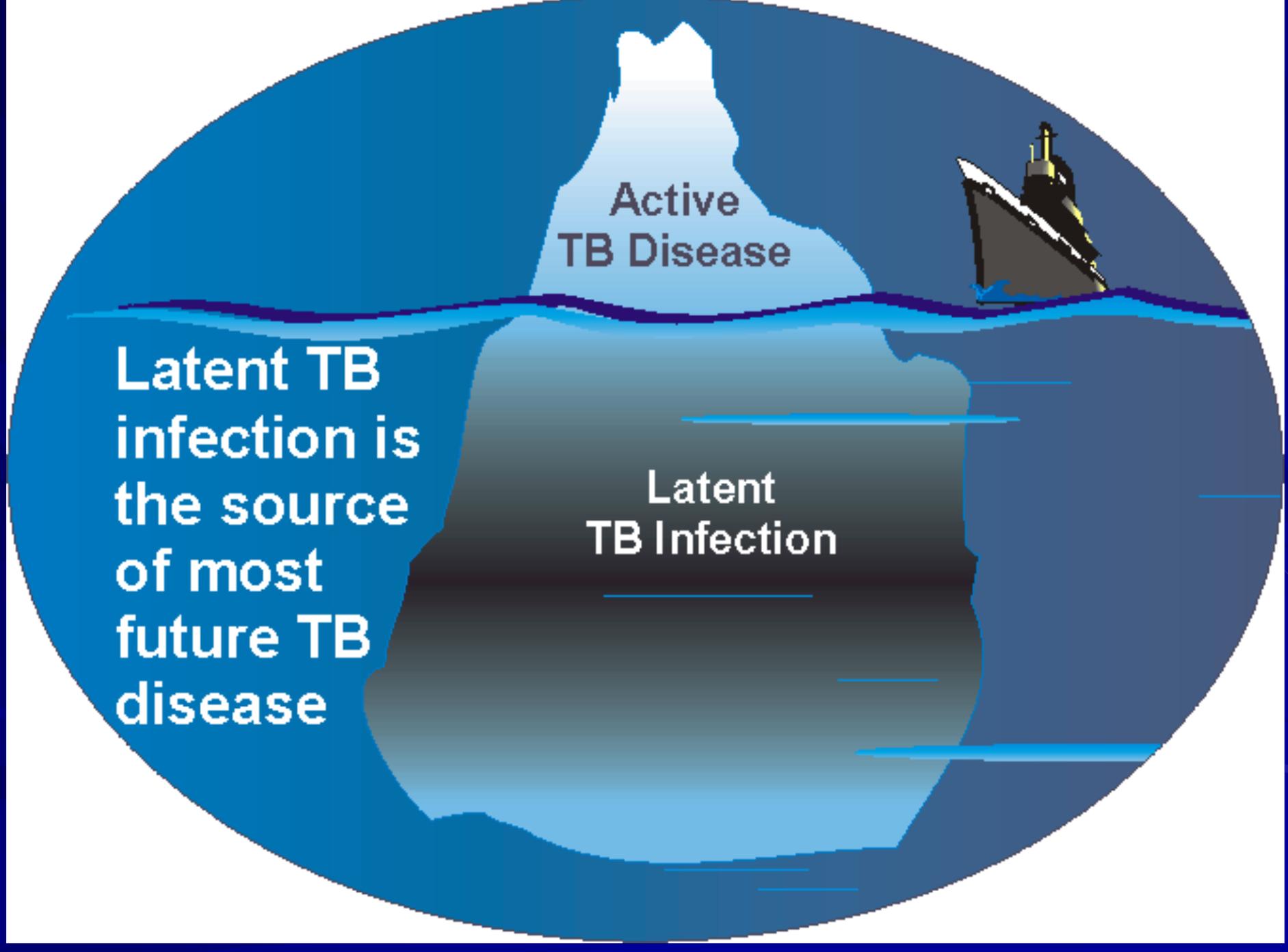
- CDC estimates that 9 contacts are identified for every verified pulmonary and laryngeal TB case in the US. Of those:
  - 25-30% are infected with TB
  - 1% of infected contacts have already progressed to TB disease
  - 10% of newly infected contacts will develop TB disease-5% within 2 years
  - Contacts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

# National Objectives

- Contacts will be identified for 100% of newly reported sputum smear positive cases
- 93% of contacts to sputum smear positive cases will be evaluated for infection and disease
- 88% of infected contacts who are started on treatment for LTBI will complete therapy
- 79% of contacts to sputum smear-positive TB patients started on treatment for newly diagnosed LTBI will complete treatment

# Michigan Contact Follow-up 2007

	Sputum smear +		Sputum smear -, cult +	
Cases for investigation	75		27	
Number of contacts/case	1,368		54	
Evaluation rate	82%	1,125	76%	41
TB disease	21		2	
LTBI	15%	173	17%	7
-tx rate	65%	113	100%	7
-completion rate	69%	78	71%	5



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

- Establish priorities based upon
  - Transmission risk assessment
  - Host risk
  - Concentric circle approach
- Contacts who are HIV infected or are young children receive highest priority!!!

“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