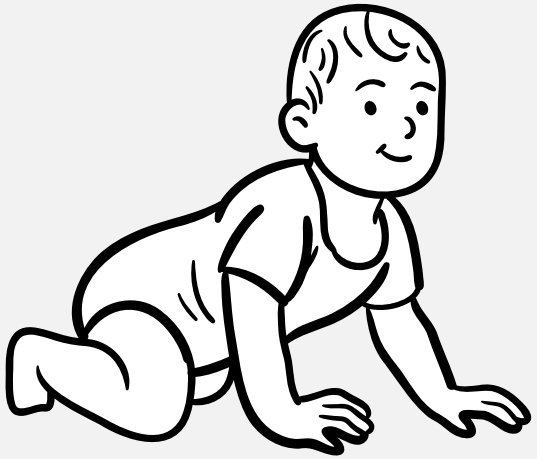
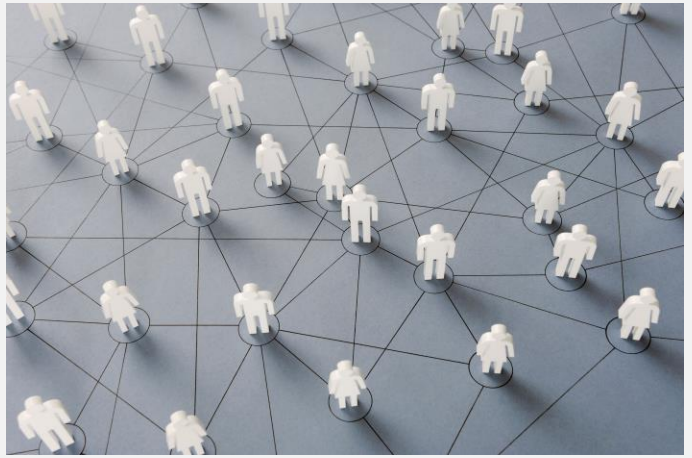
Complexities in TB Case Management:

A Case Review

ST. CHARLES COUNTY

What comes to mind when you think of complicated TB case-management?





- Involvement of children
- Large contact investigation
- Language barrier
- Lack of transportation
- Community provider availability





Goals for this presentation:

- Highlight **successes and challenges** during TB case management and TB contact investigations.
- Show **real-world complexity** for DPH & community providers.
- Demonstrate **how one case can expand into additional cases:** both **active** and **latent.**

Presentation contents

- **Case 1**
  - Contact Investigation Challenges
  - Pediatric LTBI management
- **Case 2** (pediatric TB)
- **Key takeaways & improvements**

Case 1 Background

Case History

- Contact to TB case in 2024
  - *Case 1 was **not** tested at that time*
- Symptom onset: 10/29/2025
  - *Cough, fever, loss of appetite, fatigue*
- 2 weeks later: Urgent Care → ED
  - ➢ imaging shows **necrotizing pneumonia** and **cavitary lesions**

✓Dx **Tuberculosis**

Case 1 Timeline of Events

Exposure

2024

Symptom onset

10/29/25

Urgent Care / ED

11/11/25

LPHD notified

11/13/25

DPH initial interview & initiation of RIPE

11/14/26

Case 1

Immediate Challenges:

- **Language**
  - *Spanish-speaking*
- Health Care
  - ***Uninsured***
- **Several** contacts
  - *Both inside* and *outside of the home*
- **Children** involved
- **Imminent** hospital discharge
  - *To be sent home same day as initial interview*

Question 1

Your infectious TB patient is being discharged from the hospital late in the day on Friday. Do you:

a) Strongly encourage hospital personnel to keep inpatient until Monday

b) Advise that the patient be discharged home with 3 day of medication (in hand) and a supply of masks

c) Send the patient to a hotel for isolation

d) Instruct that the patient be discharged with a prescription for TB meds to be filled at an outpatient pharmacy

Case 1

Immediate Challenges –*continued-*

- **Medications** for discharge
  - *Coordinate with hospital IP and case management*

- Discharge while on **isolation**
  - *Others living in the home, including a child **under 5 years old***

Question 2

Who is the priority for the INITIAL testing in a contact investigation?

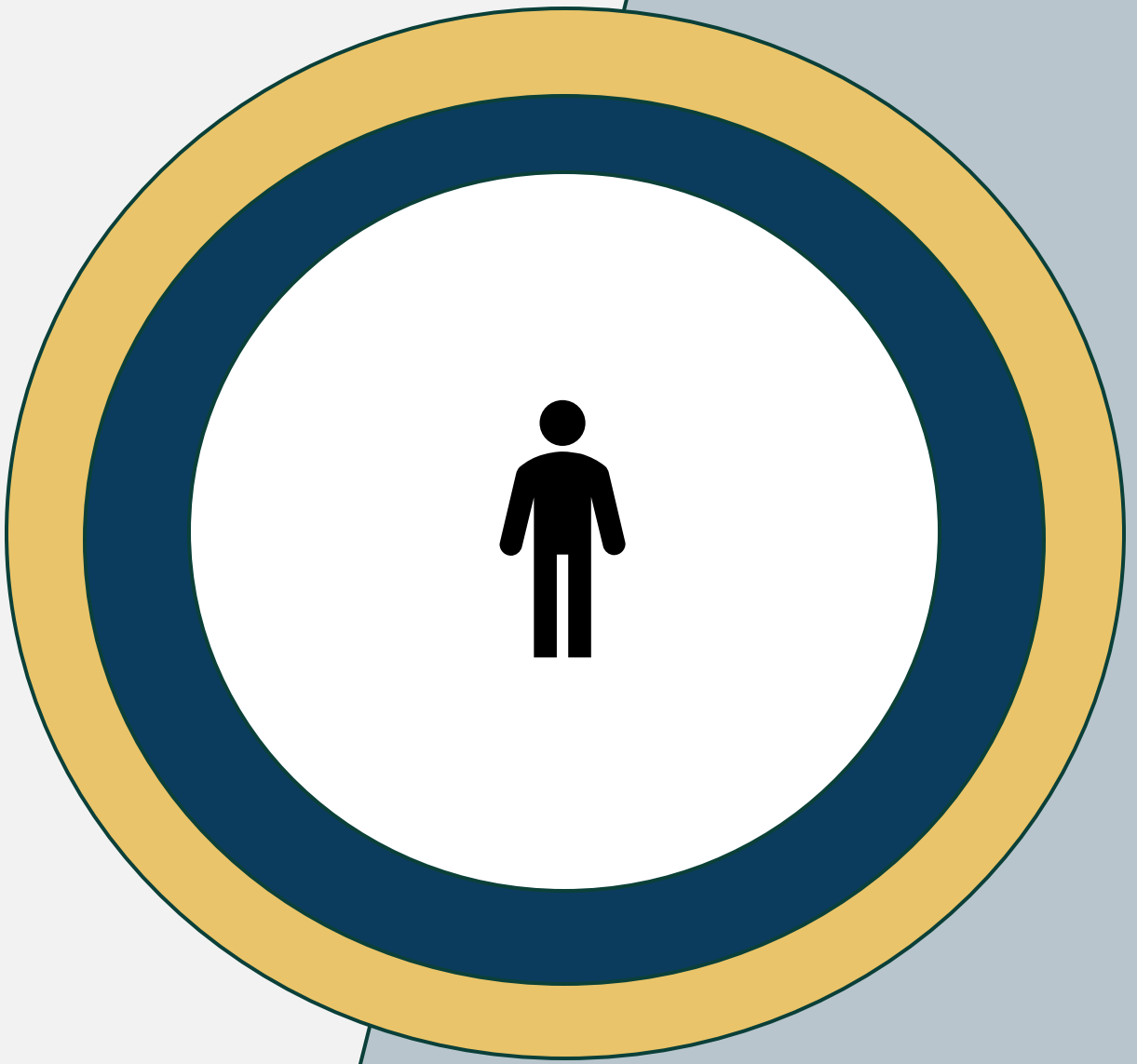
a) Household contacts

b) A receptionist at a medical facility with a few minutes of contact

c) Contacts under the age of 5

d) Both A and C

Concentric Circle Approach



Question 3

What may affect infectiousness of a person with active TB?

a) Ventilation of the exposure environment

b) Body organ (of patient) affected by TB

c) Length of exposure

d) All of the above

Case 1

CI Workup

Challenges Identified

- Many of the same challenges identified before but on a larger scale
- No baseline TB testing
- Lack of trust
  - ***Tested contacts in Case 1's home***
- 3 pediatric contacts needing full workups

CI Results

9 contacts identified

- 5 **positive** tests
- 3 negative
- 1 lost to follow up
- Expanded CI to health care contacts

Resulting workload:

- multiple LTBI, including **two children under 5yrs old**

Contacts Needing Further Evaluation

The DSP Situation

- MO Program that helps provide access to TB diagnostic tests
  - ***CXR***
  - ***Office visits with provider***
  - ***Induced sputum collection (if indicated)***
- Disagreement on interpreter services for SCC DSP Provider
  - ***Would not see patients without an in-person interpreter***

Become a DSP Provider!

- Not available in counties already contracted with MO TB Program
- Reimbursement to provider for services performed

Reach out to your LPHA for more information

CI Referrals to FQHC

Logistics Issues

- Transportation issues
  - ***Used MO TB Enablers Program to cover transport costs***
- Attempted to bill DSP Program for services
  - ***Worked extensively with clinic staff to connect with MO TB Program***

Issues with FQHC

- Lack of coordination within the facility
  - ***Turned patients away if approached the wrong desk***
- Believed contacts were infectious until proven otherwise
  - ***Clinic staff were fearful***
  - ***Cancelled patient appointments unbeknownst to LPHA***

Question 4

A clinic room at the FQHC should be "shut down" for a period after evaluation for a LTBI case that is asymptomatic with a normal CXR?

a) true

b) false

Status Update

Cons

- Child contacted rejected by FQHC sent to a specialist
  - ***Delay in evaluation time***
- 2 LTBI's under 5 years old needing DOT
  - ***Adjusting children to med regimen***
- Continued workload of other communicable disease cases
- Extensive use of interpreter services

Pros

- Index case was not medically complicated
- Continued use of Incentives & Enablers Program
- Ability to cluster DOT appointments

Case 2

Another Active Case?

- Child referred to ID specialist for TB evaluation had 1 month follow up appointment
- DOT resumed as normal the next day
- Parents contacted by ID team over concerns with CXR
  - ***Consult to Mayo Clinic***
- Pt admitted to the hospital for further diagnostic workup and treatment
  - ***Gastric aspirate tested***

✓ Dx **Active Tuberculosis**

Case 2 Timeline of Events

Last exposure to index case

11/09/2025

Identified as a contact & initial interview

11/17/2025

Home visit with patient

11/20/2025

Appointment with FQHC (cancelled)

12/01/2025

FQHC refuses to see patient

12/04/2025

Window Prophylaxis workup with ID

12/11/2025

Started 4R regimen for LTBI

12/17/2025

Case 2 Timeline of Events (continued)

1 Month follow up appointment with ID

1/07/2026

Admission to hospital

1/08/2026

1st Gastric aspirate collected

1/09/2026

RIPE initiated & Discharge from Hospital

1/11/2026

Question 5

Children with active pulmonary TB are considered less infectious than adults.

a) true

b) false

Case 2

DOT Visits Following New Diagnosis

- Pt placed on "soft isolation"
  - ***CI conducted for household members***
  - ***Children generally less infectious than adults***
- Frequent and in-depth review of information about new diagnosis
  - ***Patient did not appear ill***
  - ***6 months of treatment***
- 4/5 medications could only be formulated as tablets
  - ***Had to be crushed and administered as powder***

First RIPE at Home

- Started with liquid rifampin
- Crushed meds mixed in sorbet
- Lots of screaming and crying
- Vomited all meds given: FAIL

Had to re-strategize how meds were going to be given

Question 6

Your 18 month-old active TB patient is refusing to take medications. How would you handle this situation?

a) Try to obtain TB medication in liquid formulation, administer with syringe

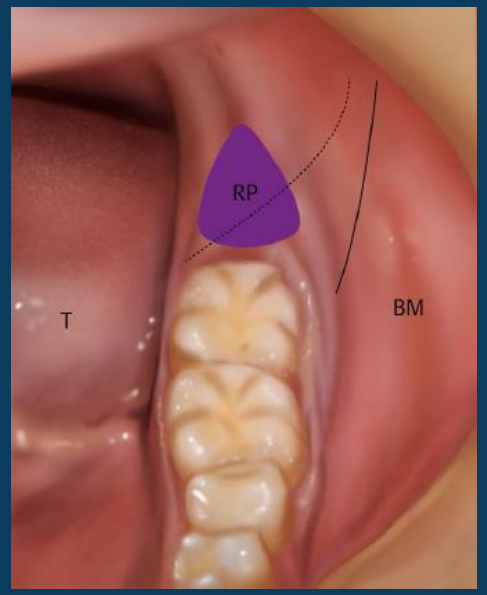
b) Crush medication, add to pudding, feed with spoon

c) Employ a second family member to secure child's arms and provide distraction

d) Crush medication, add juice, administer with syringe

Case 2

Crushed Meds for Oral Injection



Source: Iwanaga, Mikushi, & Tohara (2016).



Source: The Mama Dentist (2023).

- Lay child back in parent's arms
- Parent hooks finger around child's cheek and pulls it away from teeth
- Inject medication behind the teeth onto the retromolar pad

Case 2

Case Progression

Successes

- Med administration was improving
  - ***Transition to VDOT via SureAdhere platform***
- Continued use of Incentives/Enablers Program
  - ***Cellphone tripod to record VDOT***
  - ***Walmart gift cards for juice to use with meds***

Challenges

- VDOT tech issues
  - ***Days with missed uploads***
- Temporary loss of Incentives/Enablers Program
  - ***No access to Walmart gift cards***
- Communication difficulty with ID office

Question 7

What are some examples of incentives and enablers that may be utilized to help a person with TB complete treatment?

a) Assistance with rent or utility bills

b) Walmart gift cards to purchase juice or cookies

c) Assistance with medical bills

d) All of the above

Outcomes

- Case 1 completed 9 months of treatment on 8/13/2026
  - ***CXR showed resolution of infiltrates and cavitary lesions***
- 1 out of 3 adult LTBIs completed treatment
  - ***1 lost to follow up after 1 month***
  - ***1 ended treatment after 3 months***
- Case 2's treatment extended to meet required 182 total witnessed doses
  - ***6 months of treatment became 7 months***
  - ***Completed treatment on 8/06/2026***

Key Takeaways

- Start preparing for your next TB case
  - ***Empower your team***
- Build healthcare partnerships early
  - ***Learn how your local TB program operates***
- Adapt when plans change
  - ***Think critically to solve problems***

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