Infection Prevention Office Hours

7/21/2023





Agenda

- **✓TB: A Snapshot**
- **✓ PA State Regulations**
- **✓TB Risk Assessments**
- **✓TB Screening**
- **✓ Annual TB Education**
- **✓ Questions and Discussion**

Tuberculosis (TB): A Snapshot

WHAT CAUSES TB?

TB is caused by a bacteria called *Mycobacterium tuberculosis* and most often attacks the lungs

- Not everyone who gets the bacteria becomes actively sick: this is known as latent TB
 (LTBI)
- Others get the bacteria and become actively infected and sick: this is known as TB disease
- Only those with ACTIVE TB disease can spread it to others

WHAT ARE SYMPTOMS OF TB DISEASE?

- Cough lasting > 3 weeks
- Coughing up blood
- Weight loss
- Nigh Sweats
- Chills/Fever

WHAT ARE RISK FACTORS FOR TB DISEASE?

- Those exposed to TB bacteria
- Having latent TB
- Those with weakened immune systems

HOW IS TB SPREAD?

- TB spreads through the air from one person to the other
- The bacteria is inhaled into the lungs and begins to grow. It can spread to other areas of the body (spine, brain)

PA State Regulation

201.22. Prevention, control and surveillance of tuberculosis (TB)

- (a) The facility shall have a written TB infection control plan with established protocols which address risk assessment and management, screening and surveillance methods, identification, evaluation, and treatment of residents and employees who have a possible TB infection or active TB
- (b) Recommendations of the Centers for Disease Control and Prevention (CDC), United States Department of Health and Human Services (HHS) shall be followed in screening, testing and surveillance for TB and in treating and managing persons with confirmed or suspected TB

Interpretive Guidelines: The TB infection control plan includes residents and employees, and the facility must follow the CDC guidelines and utilize an approved method of management, screening and surveillance.

CDC Recommendations for TB

	2005 Recommendations	2019 Recommendations — Key Changes
Screening	Recommended for all health care personnel pre-placement/upon hire* Annual screening may be recommended based on risk assessment of health care facility and setting	Individual baseline TB risk assessment added Annual TB screening no longer routinely recommended for most health care personnel unless occupational risk or ongoing exposure
Post- exposure testing	Recommended IGRA or TST test for all health care personnel when an exposure is recognized If that test is negative, do another test 8–10 weeks after the last exposure	No change
Treatment of positive TB test	Referral to determine whether latent TB infection (LTBI) treatment is indicated	Treatment is encouraged for all health care personnel with untreated LTBI Shorter course (3 to 4 month) treatments encouraged over the longer (6 or 9 month) regimens because they are easier to complete
TB education	Recommended annually for all health care personnel*	Annual education should include information about TB risk factors, the signs and symptoms of TB disease, and TB infection control policies and procedures

TB risk assessment - Facility

- Annual Facility Risk assessment determines the need for surveillance testing. Annual testing of staff is longer done routinely
- Facility-wide assessments require data from the previous year which can be obtained from PA DOH. To the right are the data points for the SC region for 2022
- Historical data can be obtained from <u>PA-EDDIE</u>
- PA DOH contact: Kimberly Gladfelter <u>kigladfelt@pa.gov</u>

	2022	
Jurisdiction	Cases	Rate**
Pennsylvania	173	1.35
Bedford	0	0.00
Blair	0	0.00
Cumberland	3	1.18
Dauphin	11	3.95
Franklin	1	0.65
Fulton	0	0.00
Huntingdon	0	0.00
Juniata	0	0.00
Lebanon	5	3.53
Mifflin	0	0.00
Perry	1	2.16
York	6	1.34

^{**}Rate per 100,000 population

2022 National Rate is 2.5 per 100,000

TB screening - Healthcare Personnel

Upon hire:

- Individual TB risk assessment
- Screen for TB symptoms
- TB test (TST or IGRA)

Annually:

- HCPs diagnosed with LTBI who decline treatment should be screened annually for any signs or symptoms of TB
- After exposure (if indicated):
 - Symptom screen & testing



Tuberculosis (TB) Risk Assessment - Adults

- Use this tool to identify asymptomatic adults for TB testing.
- Do not repeat TB testing unless there are new risk factors since the last test.
- Do not treat for TB infection until a diagnosis of active TB disease has been excluded:
- For patients with TB symptoms or an abnormal chest x-ray consistent with active TB disease, evaluate for active TB disease with a chest x-ray, symptom screen, and — if indicated — sputum AFB smears, cultures and nucleic acid amplification testing (NAAT). A negative interferon gamma release assay or tuberculin skin test does not rule out active TB disease.

gamma release assay or tuberculin skin test does not rule out active TB disease.			
TB testing is recommended if any of the	3 boxes below are checked.		
Birth, travel or residence in a country with a month Includes any country other than the United States, Ca country in western or northern Europe.			
 If resources require prioritization within this group, prioritize those patients with at least one medical risk for progression to TB disease (see the Pennsylvania Adult TB Risk Assessment User Guide for a list). 			
 An interferon gamma release assay test is preferred or born persons 2 years of age or older. 	ver a tuberculin skin test for non-U.S.		
Immunosuppression, current or planned Examples include HIV infection, organ transplant recipient or treatment with a TNF-alpha antagonist (e.g., infliximab, etanercept, others), steroids (equivalent to a prednisone dose of 15 mg/day for one month or longer), or other immunosuppressive medication.			
Close contact to someone with infectious TB disease during lifetime			
If TB test is positive, rule out active TB disease before diagnosing TB infection.			
☐ No risk factors identified; TB testing is <u>not</u> indicated at this time			
Provider: Patient	Name:		
Assessment Date: Date of	Birth:		

For more information about using this tool see the Pennsylvania Adult TB Risk Assessment User Guide on our <u>website</u>

Adapted for local use from the California Tuberculosis Risk Assessment tools at <u>www.ctca.org</u>



TB screening - Residents

- Admission Testing:
 - 2-step Mantoux skin test (TST)

OR

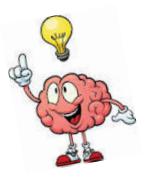
- Interferon gamma release assay (IGRA) blood test)
- Ongoing: Clinical Assessment and awareness of symptoms
 - Cough lasting > 3 weeks or coughing up blood
 - Weight loss
 - Chills/fevers
 - Night sweats
- Assessment/ Testing after exposure (if indicated)

Annual Staff Education for TB

Topics to include:

- Transmission of TB
- Risk factors
- Signs & symptoms of TB
- Infection control measures:
 - Administrative measures (risk assessment & TB plan)
 - Environmental controls (ventilation/negative pressure rooms/hep filters)
 - PPE (respiratory protection program- fit testing/N-95s, respiratory etiquette)





Let's Discuss!

Remember - The Best Learning We Do is from Each Other!

- What are your Facility Practices/Protocols?
- What are your Successes?
- What are your Challenges?
- Do you have any Questions or Topic Suggestions?



References and Helpful Resources

TB Guidelines

Infection Control & Prevention | TB Guidelines by Topic | Publications & Products | TB | CDC

TB screening and testing of Healthcare Personnel

TB Screening and Testing of Health Care Personnel | TB | CDC

Indiana DOH - TB Assessment and Testing of LTC

https://www.in.gov/health/files/IDOH-TB-Assessment-and-Testing-of-New-Residents-8-11-21.pdf

