

## WISCONSIN TUBERCULOSIS (TB) RISK ASSESSMENT QUESTIONNAIRE SCREEN

Use this screening tool to identify asymptomatic adults for latent tuberculosis infection (LTBI) testing.

Do not perform or repeat **testing** by interferon gamma release assay (IGRA) or tuberculin skin test (TST) unless there are risk factors identified by the screening tool questions below.

Do not treat for LTBI until active TB disease has been excluded:

Evaluate for active TB disease with a chest x-ray, symptom screen, and if indicated, sputum AFB smears, cultures and nucleic acid amplification testing. A negative TST or IGRA does not rule out active TB disease.

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**If any of the following four boxes are checked, recommend LTBI testing.**

**Treat for LTBI if LTBI test result is positive and active TB disease is ruled out.**

**See page 2 for more detailed information on the risk assessment boxes below.**

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- Birth, travel, or residence** in a country with high TB prevalence.
- Includes any country other than the United States, Canada, Australia, New Zealand, or a country in Western or northern Europe.
  - Travel is of extended duration or including likely contact with infectious TB in a location of high TB prevalence.
  - IGRA is preferred over TST for foreign-born persons 2 years of age or older.

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- Close** (high priority) **contact** to someone with infectious TB disease during lifetime.

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- Recent** TB symptoms: Persistent cough lasting three or more weeks **AND** one or more of the following symptoms: coughing up blood, fever, night sweats, unexplained weight loss, or fatigue.

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- Current** or former employee or resident of a high-risk congregate setting in a state/district with an elevated TB rate.
- Includes Alaska, California, Florida, Hawaii, New Jersey, New York, Texas, or Washington DC.
  - Includes correctional facility, long-term residential care facility, or shelter for the homeless.

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- A TB risk assessment has been completed for the patient named below. No risk factors for TB were identified.
- A TB risk assessment has been completed for the patient named below. Risk factors for TB have been identified. Further testing is recommended to determine the presence or absence of tuberculosis in a communicable form.

Provider Name (Print)	
Facility Name	
Street Address	Telephone Number
Assessment Date	
<b>SIGNATURE - Provider</b>	

Patient Name (Print)
Date of Birth
(Place sticker here if applicable)

## Risk Assessment Box Details

### Box 1. Birth, Travel, or Residence in a country with high TB incidence or burden

In their annual report, the World Health Organization (WHO) estimates TB incidence around the world as the number of TB cases per 100,000 persons. There are 40 high-burden TB countries including India, China, regions of Sub-Saharan Africa and South East Asia.<sup>1</sup>

**Travel:** Leisure travel to most countries in the world poses little risk of TB infection. The general travel risk is 2.8 cases of TB per 1,000 person-months of travel, however, prolonged stays or work in the health sector increase the risk of infection. Spending six or more months in an endemic country is associated with increased risk of TB infection, 7.9 cases per 1,000 person-months of travel, and direct patient care is an even higher risk, 9.8 cases per 1,000 person-months of travel.<sup>2</sup>

### Box 2. Close (High Priority) contact to someone with infectious TB disease during lifetime

Infectious TB includes patients with pulmonary culture-positive disease and those with pulmonary cavitation on radiograph. High Priority contacts include household members (1 in 3 chance of infection), children < 5 years of age and immunosuppressed individuals (cancer, diabetics, HIV-positive, organ transplantation). Also consider those exposed for shorter duration in a more confined space (exam room, dormitory room, office or vehicle).<sup>3</sup>

### Box 3. Recent TB symptoms

TB symptoms include persistent cough lasting three or more weeks AND one or more of the following symptoms: coughing up blood, fever, night sweats, unexplained weight loss, or fatigue. TB can occur anywhere in the human body but the most common areas include; lungs, pleural space, lymph nodes and major organs such as heart, liver, spleen, kidney, eyes and skin. TB can also present as an asymptomatic, non-specific respiratory illness. Clinical judgement should be accompanied by careful evaluation of patient history including, birth, travel or residence in a country with high TB incidence and history of TB in the family.<sup>4</sup>

### Box 4. Current or former employee or resident of a high-risk congregate setting in a state/district with an elevated TB rate

Wisconsin has few individuals with TB in the homeless, corrections and long-term settings; patients identified match local epidemiology (foreign-born or contacts).<sup>5</sup> Higher-risk congregate settings occur in Alaska, California, Florida, Hawaii, New Jersey, New York, Texas or Washington DC. Consult with the Centers for Disease Control and Prevention (CDC) annual TB reports and the Wisconsin TB Program website for state and local epidemiology data.<sup>6, 7, 8</sup>

## References:

- 1) World Health Organization Global Tuberculosis Report 2017. [http://www.who.int/tb/publications/global\\_report/en/](http://www.who.int/tb/publications/global_report/en/)
- 2) Cobelens, F.G.J., et al (2000). Risk of infection with *Mycobacterium tuberculosis* in travelers to areas of high tuberculosis endemicity. *The Lancet*, 356, 461-465.
- 3) CDC. Guidelines for the investigation of contacts of persons with infectious tuberculosis: recommendations from the National Tuberculosis Controllers Association and CDC. *MMWR* 2005; 54(No. RR-15).
- 4) Lewinsohn, D. et al. Official American Thoracic Society/Infectious Diseases Society of America/CDC Clinical Practice Guidelines: Diagnosis of tuberculosis in adults and children. *Clinical Infectious Diseases*, 2017; 62(2):111-115.
- 5) Wisconsin Tuberculosis Program. <https://www.dhs.wisconsin.gov/tb/index.htm>
- 6) CDC. Reported Tuberculosis in the United States. <https://www.cdc.gov/tb/statistics/>
- 7) CDC. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care settings, 2005. *MMWR* 2005; 54(No. RR-17).
- 8) CDC. Prevention and control of tuberculosis in correctional facilities: Recommendations from CDC. *MMWR* 2006; 55(No. RR-9).