

## WISCONSIN TUBERCULOSIS (TB) RISK ASSESSMENT AND SYMPTOM EVALUATION FOR ANNUAL EMPLOYEE SCREENING

All of the information on this form shall be kept confidential.

Perform testing by **interferon gamma release assay (IGRA) or tuberculin skin test (TST)** if there are risk factors identified by the questions below, or if testing is required (e.g., baseline employment testing).

Do not perform testing by IGRA or TST if the patient has previously confirmed **latent tuberculosis infection (LTBI) or tuberculosis (TB)** disease.

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

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

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

### SYMPTOM EVALUATION

**1) 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.

### RISK FOR TB INFECTION

**2) Birth, residence or travel (for  $\geq 1$  month) in a country with a high TB rate**

- 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.

**3) Close contact to someone with infectious TB disease**

### RISK FOR PROGRESSION TO TB DISEASE

**4) Human immunodeficiency virus (HIV) infection**

**5) Current or planned immunosuppression** including receipt of an organ transplant, treatment with an TNF-alpha antagonist (e.g., infliximab, etanercept, or other), chronic steroids (equivalent of prednisone  $\geq 15$  mg/day for  $\geq 1$  month), or other immunosuppressive medication **in combination with risk for infection from above.**

- I, as the individual/patient listed below, have reviewed the TB risk factors and symptoms listed on this form (see 1-5 above). I attest that, to my knowledge, **I do not have any risks or symptoms for TB.**
- I, as the individual/patient listed below, have reviewed the TB risk factors and symptoms listed on this form (see 1-5 above). **I have one or more risks or symptoms for TB.** I understand that further testing is recommended to determine the presence or absence of tuberculosis in a communicable form.

Name Screener, if applicable (Print):

Assessment Date: \_\_\_\_\_

Name - Individual/Patient (Print):

Date of Birth: \_\_\_\_\_

**SIGNATURE** - Individual/patient:

## Risk Assessment Details

### USE OF THIS FORM

Use this form to assess individual risks for *M. tuberculosis* infection in adults (age  $\geq$  15 years).

### SYMPTOM EVALUATION

TB symptoms are listed on the front of this form. TB can occur anywhere in the body but the most common areas include; lungs, pleural space, lymph nodes and major organs such as heart, liver, spleen, kidney, eyes and skin. Clinical judgement should be accompanied by careful evaluation of patient history including residence in a country with high TB incidence, history of previous treatment for TB or LTBI and history of TB in the family.<sup>4</sup>

### RISK FOR TB INFECTION

#### Birth, travel or residence (for $\geq$ 1 month) in a country with a high TB rate

The World Health Organization (WHO) estimates TB incidence around the world in the *Global Tuberculosis Report*. Please see this report for countries with high TB rates, or call the Wisconsin Tuberculosis Program.<sup>1, 5</sup>

Leisure travel to most countries in the world poses little risk of TB infection. Prolonged stays or work in the health sector in an endemic country increase the risk of infection.<sup>2</sup>

#### Close Contact to someone with infectious TB disease

Infectious TB includes pulmonary, culture-positive disease and disease 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 (HIV-positive, organ transplant, cancer, diabetes). Also consider those exposed for shorter duration in a more confined space (exam room, dormitory room, office or vehicle).<sup>3</sup>

#### Other Risks

Wisconsin has very low incidence of TB in healthcare, homeless, corrections and long-term care settings. Higher-risk congregate settings occur in Alaska, California, Florida, Hawaii, New Jersey, New York, Texas or Washington DC.<sup>5</sup>

Consult with local health departments for other locally identified high-risk groups: <https://www.dhs.wisconsin.gov/lh-depts/counties.htm>.

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, 9</sup>

### RISK FOR PROGRESSION TO TB DISEASE

Immune suppression is a risk factor for reactivation and progression to active TB disease. Immune suppression alone is not a risk for acquiring TB infection.

- LTBI treatment should be strongly considered in HIV-infected individuals; significant immune suppression can cause inaccuracy of diagnostic TB tests.
- LTBI treatment can be considered for other immune suppression (e.g., cancer, organ transplant, medications, or diabetes) **when in combination with risk for infection (see above)**.

### References:

- 1) World Health Organization Global Tuberculosis Report 2018. [https://www.who.int/tb/publications/global\\_report/en/](https://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>. Phone: 608-261-6319.
- 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. Tuberculosis screening, testing, and treatment of U.S. health care personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019. *MMWR* 2019; 68(No. 19).
- 9) CDC. Prevention and control of tuberculosis in correctional facilities: Recommendations from CDC. *MMWR* 2006; 55(No. RR-9).