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Additional Information for:
Tuberculosis Infection
Initial Request For Medication, F-00905

Remember – a person must have a risk of infection before the risk of progression to active disease considered!

RISK FOR TB INFECTION

Birth, travel or residence (for ≥ 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.[1, 5]

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.[2]

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).[3]

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.[5]

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. [6, 7, 8, 9]

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).

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1) World Health Organization Global Tuberculosis Report 2018. 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).
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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/
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Tuberculosis (TB) Infection Treatments

Wisconsin Department of Health Services
Division of Public Health, Tuberculosis Program

Once a person is diagnosed with TB infection, treatment should be offered. We recommend that all treatment be done in collaboration with the local health department. Assistance with costs of care and treatment is available through the local health department.

There are four treatments available.

1. Three months of weekly isoniazid (INH) and rifapentine is the preferred regimen for patients over two years of age, due to its high completion rates. We strongly recommend giving all doses given as directly observed therapy (DOT) once per week for 12 weeks. DOT is required if receiving medications from the WI TB Dispensary Program.

   Rifapentine 900 mg + INH 900 mg once weekly X 12 weeks; DOT strongly recommended

Rifapentine	10.0-14.0 kg	300 mg	INH	Age 2-11 years	25 mg/kg*
	14.1-25.0 kg	450 mg		Age 12+ years	15 mg/kg*
	25.1-32.0 kg	600 mg		*900 mg maximum.	
	32.1-49.0 kg	750 mg		Round up to nearest 50 or 100 mg	
	≥50.0 kg	900 mg maximum			

2. Four months of daily rifampin is the preferred regimen for those unable to take weekly INH/rifapentine or for contacts of INH resistant cases. Treatment is usually given daily self-administered, with the patient picking up medications monthly. Consider the patient's reliability.

   Rifampin 600 mg daily X 4 months; self-administered, patient picks up pills monthly
   15-20 mg/kg infants and children; 10 mg/kg adults; 600 mg maximum

3. Six to nine months of isoniazid is acceptable but has very low completion rates in many instances. Treatment is usually given daily self-administered, with the patient picking up medications monthly. Consider the patient's reliability.

   Isoniazid (INH) 300 mg daily X 6-9 months; self-administered, patient picks up pills monthly
   10-15 mg/kg infants and children; 5 mg/kg up adults; 300 mg maximum

4. Two months of the **standard four-drug treatment—isoniazid, rifampin, pyrazinamide, and ethambutol-- by directly observed therapy** is the preferred regimen for patients for whom a diagnosis of active TB disease is still possible**.** At the end of two months, reassess patient and laboratory results:

   If the culture is positive OR the patient improves on treatment, consider active TB disease confirmed and treat accordingly.

   If the culture is negative OR the patient does not improve on treatment, end treatment and consider other diagnoses as appropriate. Treatment for latent TB infection is complete.

Wisconsin Vitamin B-6 Recommendations:
Pyridoxine (vitamin B-6) supplementation 10-50mg/day with isoniazid (INH) or 50mg/week with the 12-week regimen of Rifapentine and INH is recommended ONLY for persons with: diabetes, uremia, alcoholism, malnutrition, HIV, seizure disorders and for pregnant or breastfeeding women. Exclusively breastfeed infants and children/adolescents on meat and milk-deficient diets or nutritional deficiencies should also receive B-6 when on INH therapy. Most adults and children do not need pyridoxine supplements.