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!

BOX 1. Risk factors for Mycobacterium tuberculosis infection

Persons at increased risk for *M. tuberculosis* infection:

- close contacts of persons known or suspected to have active tuberculosis;
- foreign-born persons from areas that have a high incidence of active tuberculosis (*e.g.*, Africa, Asia, Eastern Europe, Latin America, and Russia);
- persons who visit areas with a high prevalence of active tuberculosis, especially if visits are frequent or prolonged;
- residents and employees of congregate settings whose clients are at increased risk for active tuberculosis (*e.g.*, correctional facilities, long-term care facilities, and homeless shelters);
  NOTE: There is very little TB in Wisconsin congregate settings, so unless there has been a known case of active disease within the facility, residents and employees are NOT generally at increased risk for TB.
- health-care workers who serve clients who are at increased risk for active tuberculosis;
- populations defined locally as having an increased incidence of latent *M. tuberculosis* infection or active tuberculosis, possibly including medically underserved, low-income populations, or persons who abuse drugs or alcohol; and
- infants, children, and adolescents exposed to adults who are at increased risk for latent *M. tuberculosis* infection or active tuberculosis.

Source: Based on CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. *MMWR* 2000;49(No. RR-6).

BOX 2. Risk factors for progression of infection to active tuberculosis

Persons at increased risk for progression of infection to active tuberculosis include:

- persons with human immunodeficiency virus (HIV) infection;
- infants and children aged <5 years;
- persons who are receiving immunosuppressive therapy such as tumor necrosis factor–alpha (TNF-α) antagonists, systemic corticosteroids equivalent to ≥15 mg of prednisone per day, or immune suppressive drug therapy following organ transplantation;
- persons who were recently infected with *M. tuberculosis* (within the past 2 years);
- persons with a history of untreated or inadequately treated active tuberculosis, including persons with fibrotic changes on chest radiograph consistent with prior active tuberculosis;
- persons with silicosis, diabetes mellitus, chronic renal failure, leukemia, lymphoma, or cancer of the head, neck, or lung;
- persons who have had a gastrectomy or jejunoileal bypass;
- persons who weigh <90% of their ideal body weight;
- cigarette smokers and persons who abuse drugs or alcohol; and
- populations defined locally as having an increased incidence of active tuberculosis, possibly including medically underserved or low-income populations

Source: Based on CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. *MMWR* 2000;49(No. RR-6).

Tuberculosis (TB) Infection Treatments

Wisconsin Department of Health Services
Division of Public Health, Tuberculosis Control and Prevention Program

Once a person is determined to have 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, including copays, is available through the local health department.
There are four treatments available as of 7/1/13.

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1. We recommend treating all persons at high risk of moving from infection to disease (such as recent immigrants or infected contacts to cases) with this regimen. This is the most efficient way to ensure complete treatment, with all doses given as directly observed (DOT) doses once per week for 12 weeks.

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

For those who weigh less than 50 kg, dosing is:
INH 15 mg/kg, rounded up to nearest 50 or 100 mg; 300 mg maximum

Rifapentine	10.0-14.0 kg	300 mg
14.1-25.0 kg	450 mg	
25.1-32.0 kg	600 mg	
32.1-49.9 kg	750 mg	
≥ 50.0 kg	900 mg maximum	

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2. The "usual" treatment of nine months of isoniazid is acceptable, but has very low completion rates in many instances. This low and sometimes intermittent dose of INH can create drug resistance in the event of TB disease. Consider the reliability of the person who will receive the medication before prescribing.

Isoniazid (INH) 300 mg daily X 9 months; self-administered, patient picks up pills monthly

10-15 mg/kg infants and children; 5 mg/kg up to 100 lb/45.5 kg adults; 300 mg maximum

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3. This treatment is used primarily for those who cannot take INH. Again, completion rates may be low over this extended period of daily medication. Consider the patient's reliability.

Rifampin 600 mg daily X 4 months; self-administered, patient picks up pills monthly

10-20 mg/kg infants and children; 10 mg/kg up to 100 lb/45.5 kg adults; 600 mg maximum; children treated for 6 months

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4. Clinical TB, or signs and symptoms highly suspicious for TB without immediate laboratory evidence of TB, can be disconcerting. For patients for whom a diagnosis of TB disease is still a possibility, treatment for both disease and infection can be done while waiting for cultures to grow and/or to assess improvement with treatment. Start **standard four drug treatment by directly observed therapy**; at the end of two months reassess the patient and laboratory results.

If the culture is positive OR the patient shows improvement on treatment, a diagnosis of TB disease is in order, with subsequent treatment as needed (*i.e.*, 6 months total treatment for most persons; 9 months at least with cavitation on CXR or CT; 12 months at least for meningeal TB, etc.)

If the culture is negative OR the patient shows no improvement in signs or symptoms, continue diagnostic testing as appropriate and end the patient's TB treatment. Treatment for TB infection is complete after two months of four drug therapy.