

**WISCONSIN ANTITUBERCULOSIS THERAPY PROGRAM
 INITIAL REQUEST FOR MEDICATION**

Information for completing form on reverse side. Instructions on separate page. Necessary fields are marked with an * asterisk.

*Patient Name (Last, First, Middle Initial)			*Date of Birth (mm/dd/yyyy)		
*Address (Street or Rural Route)			Telephone Number ()		
*City		*Zip Code	*County		Patient's Medicaid ID No.(If applicable)
*Sex	Race	*Weight	Parent / Guardian Name (If Patient is under 18 years of age)		
*Physician Name				Physician DEA Number (for MA recipients)	
*Address(Street, City, State, Zipcode)				*Telephone Number ()	

1. *Mantoux Tuberculin Skin Test: Date Applied _____ Date Read _____ Results (**induration only**) _____ mm
 2. *Reason for skin test and referral for treatment: (refer to instructions for explanation)
 - Treatment for active TB disease (suspected or confirmed)
 - Contact to a current case of TB Name of case, if known _____
 - Medical risk factor Specify _____
(e.g. diabetes, immunosuppression, substance abuse, skin test conversion, etc.)
 - Population risk factor Specify _____
(e.g. health care worker, correctional facility, foreign-born, nursing home, etc.)
 3. *Chest X-Ray: Date _____ Results: Normal Abnormal Abnormal but stable **(Chest x-ray must be performed within the last 6 months. If Abnormal, or Abnormal but stable, a copy of the report is required.)**
- Check all that apply
4. Prior Mantoux tuberculin skin test? Specify Date: _____ Results _____ mm
 5. Risk factors for adverse reactions or non-adherence? Specify _____
 Baseline blood tests, if applicable[†] Date _____ Type of tests _____
[†] Refer to references, listed at the bottom, for explanation of patient monitoring requirements.
 6. Prior treatment for tuberculosis infection or disease? Explain: _____
 7. Born outside the United States? Specify country of birth _____ Arrival in U.S. (mm/yyyy) _____

Review treatment recommendations / dosages on reverse side

*Drug Selection	*Dosage/Frequency	*Number of Months
Isoniazid (INH)	_____	_____
Rifampin (RIF)	_____	_____
Pyrazinamide (PZA)	_____	_____
Ethambutol (EMB)	_____	_____
Other (specify)	_____	_____

For Division of Public Health Use Only

Patient No. _____

Sent to _____

*SIGNATURE - Physician _____ *Date Prescription Ordered _____

* Necessary information. Request cannot be processed with missing or out-of-date information.

References:
 Centers for Disease Control and Prevention. Treatment of Tuberculosis. MMWR 2003;52(No. RR-11).
 Targeted tuberculin testing and treatment of latent tuberculosis infection. MMWR 2000;49(No. RR-6).

Submit completed form to: **Public Health - Madison & Dane County, 210 M L King Jr Blvd, Rm 507, Madison, WI 53703 Fax: (608) 266-4858**

Drug Regimens for Active Tuberculosis Disease Caused by Drug-Susceptible Organisms

Regimen	Drugs	INITIAL PHASE Interval and Doses‡ (minimum duration)	Regimen	Drugs	CONTINUATION PHASE Interval and Doses‡# (minimum duration)	TOTAL DOSES (Minimum duration)	RATING*	
							HIV-	HIV+
1	INH RIF PZA EMB	Seven days per week for 56 doses (8 weeks) or five days per week for 40 doses (8 weeks) ¶	1a	INH/RIF	Seven days per week for 126 doses (18 wk) or 5 days per week for 90 doses (18 weeks)	182 – 130 (26 weeks)	A	A
			1b	INH/RIF	Twice-weekly for 36 doses (18 weeks) (DOT) ◆	92 – 76 (26 weeks)	A	A§
			1c**	INH/RPT	Once-weekly for 18 doses (18 weeks) (DOT) ◆	74 – 58 (26 weeks)	B	E
2	INH RIF PZA EMB	Seven days per week for 14 doses (2 weeks) then twice-weekly for 12 doses (6 weeks) or five days per week for 10 doses (2 weeks) ¶ then twice-weekly for 12 doses (6 weeks) (DOT) ◆	2a	INH/RIF	Twice-weekly for 36 doses (18 weeks) (DOT) ◆	62 – 58 (26 weeks)	A	B§
			2b**	INH/RPT	Once-weekly for 18 doses (18 weeks) (DOT) ◆	44 – 40 (26 weeks)	B	E
3	INH RIF PZA EMB	Three times per week for 24 doses (8 weeks) (DOT) ◆	3a	INH/RIF	Three times per week for 54 doses (18 weeks) (DOT) ◆	78 (26 weeks)	B	B
4	INH RIF EMB	Seven days per week for 56 doses (8 weeks) or five days per week for 40 doses (8 weeks) ¶	4a	INH/RIF	Seven days per week for 217 doses (31 weeks) or five days per week for 155 doses (31 weeks) ¶	273 – 195 (39 weeks)	C	C
			4b	INH/RIF	Twice-weekly for 62 doses (31 weeks) (DOT) ◆	118 – 102 (39 weeks)	C	C

*A = preferred; B = acceptable alternative; C = offer when A and B cannot be given; E = should never be given

INH = isoniazid, RIF = rifampin, RPT = rifapentine, PZA = pyrazinamide, EMB = ethambutol

‡When DOT is used, drugs may be given 5 days per week and the necessary number of doses adjusted accordingly

**Options 1c and 2b should only be used in HIV-negative patients who have negative sputum smears at the time of completion of 2 months of therapy and who do not have cavitation on the initial chest radiograph. For patients started on this regimen and found to have a positive culture at 2 months, treatment should be extended an extra 3 months.

Patients with cavitation on initial chest radiograph and positive cultures at completion of 2 months of therapy should receive a 7-month (31 week; either 217 doses [daily] or 62 doses [twice-weekly]) continuation phase for a total treatment duration of 39 weeks.

§ Not recommended for HIV-infected patients with CD4 cell counts < 100 cells/ml. HIV status and/or CD4 cell counts must be documented prior to using this regimen.

¶ Five-day-a-week administration is always given by DOT.

◆ Intermittent administration (once-weekly, twice-weekly, three times per week) is always given by DOT.

Drug Regimens for Treatment of Latent Tuberculosis Infection (LTBI) in Adults

Drug	Interval and Duration ◆	Comments	Rating*	
			HIV -	HIV +
Isoniazid	Daily for 9 mo†§	In HIV-infected patients, isoniazid may be administered concurrently with NRTIs, protease inhibitors, or NNRTIs	A	A
	Twice-weekly for 9 mo†§	Directly observed therapy (DOT) must be used with twice-weekly dosing	B	B
	Daily for 6 mo§	Not indicated for HIV-infected persons, those with fibrotic lesions on chest radiographs, or children	B	C
	Twice-weekly for 6 mo§	DOT must be used with twice-weekly dosing	B	C
Rifampin	Daily for 4 mo	For persons who are contacts of patients with isoniazid-resistant, rifampin-susceptible TB	B	B

◆ Twice-weekly administration is always given by DOT.

* Strength of recommendation: A = preferred; B = acceptable alternative; C = offer when A and B cannot be given.

† Recommended regimen for children younger than 18 yr of age.

§ Recommended regimens for pregnant women.

Doses[§] of Antituberculosis Drugs for Adults and Children[#]

Drug	Preparation	Adults/children	Dosing						
			Daily	1x per week (DOT)	2x per week (DOT)	3x per week (DOT)			
Isoniazid	100 or 300 mg tablets; elixir (50 mg/5 ml); aqueous solution for IV injection (100 mg/ml)	Adults (Max.)	5 mg/kg (300 mg)	15 mg/kg (900 mg)	15 mg/kg (900 mg)	15 mg/kg (900 mg)			
		Children (Max.)	10-15 mg/kg (300 mg)	—	20-30 mg/kg (900 mg)	—			
Rifampin	150 or 300 mg capsules; aqueous solution for IV injection	Adults†(Max.)	10 mg/kg (600 mg)	—	10 mg/kg (600 mg)	10 mg/kg (600 mg)			
		Children (Max.)	10-20 mg/kg (600 mg)	—	10-20 mg/kg (600 mg)	—			
Rifabutin	150 mg capsule	Adults† (Max.)	5 mg/kg (300 mg)	—	5 mg/kg (300 mg)	5 mg/kg (300 mg)			
		Children	Appropriate dosing for children is unknown						
Rifapentine	150 mg tablet	Adults	—	10 mg/kg (600 mg) continuation phase	—	—			
		Children	Not approved for use in children						
Pyrazinamide	500 mg tablet	Adults	Weight (kg) Dose		Weight (kg) Dose				
			40-55	1000 mg	—	40-55	2000 mg	40-55	1500 mg
			56-75	1500 mg	—	56-75	3000 mg	56-75	2500 mg
			76-90	2000 mg	—	76-90	4000 mg	76-90	3000 mg
		Children (Max.)	15-30 mg/kg (2000 mg)		—	50 mg/kg (4000 mg)	—	—	—
Ethambutol	100 or 400 mg tablets	Adults	Weight (kg) Dose		Weight (kg) Dose				
			40-55	800 mg	—	40-55	2000 mg	40-55	1200 mg
			56-75	1200 mg	—	56-75	2800 mg	56-75	2000 mg
			76-90	1600 mg	—	76-90	4000 mg	76-90	2400 mg
		Children†† (Max.)	15-20 mg/kg (1000 mg)		—	50 mg/kg (4000 mg)	—	—	—

Combination drug dosing¶

Rifamate® (150 mg isoniazid and 300 mg of rifampin in one tablet)	The usual adult dose is two capsules daily, taken at the same time.		
Rifater® (50 mg isoniazid, 120 mg of rifampin, 300 mg of pyrazinamide in one tablet)	≤44 kg weight 4 tablets daily	45-54 kg weight 5 tablets daily	>55+ kg weight 6 tablets daily

§Dose per weight is based on ideal body weight. Children weighing more than 40 kg should be dosed as adults.

#For purposes of this document adult dosing begins at age 15 years.

†Dose may need to be adjusted when there is concomitant use of protease inhibitors or non-nucleoside reverse transcriptase inhibitors.

††Should be used with caution in children <5 yrs in whom visual acuity cannot be monitored. In younger children, EMB at the dose of 15 mg/kg/day can be used if there is suspected or proven resistance to INH or RIF.

¶Adapted from materials produced by Bureau of Tuberculosis Control, New York City Department of Health.

Instructions for completing ANTITUBERCULOSIS THERAPY PROGRAM Initial Request for Medication

This form authorizes the purchase of anti-tuberculous medication through the Wisconsin Tuberculosis Program. The medication will be provided to any individual in Wisconsin with evidence of TB infection, TB disease, or close household contact to a person with infectious tuberculosis. Medication must be prescribed in accordance with guidelines published by the Centers for Disease Control, the American Thoracic Society, and the American Academy of Pediatrics.

Personally identifiable information on this form is voluntary however, incomplete information will result in rejection of the medication request. Information below marked with an * is necessary to complete the medication request.

***Patient Name, Date of Birth, Address, City, State, Zip, County** Include apartment number if appropriate. These fields are required in order to supply the medication to the correct patient through the appropriate local health department.

Telephone This field is not required, but will aid the local health department in contacting the patient.

***Sex** This field is required.

Race This field is not required but can aid in identifying trends in TB infection and disease.

***Weight** This field is required as proper dosing is calculated using the mg/kg ratios established for standard dosing. Information about the patient's weight is especially important when the patient is a child.

***Parent/Guardian Name** Required for children less than 18 years of age.

***Physician Name/Address/Telephone** This field is required.

***Physician Drug Enforcement Agency (DEA) Number** This field is required for recipients of Medical Assistance.

Medicaid ID No. Provide if patient is a Medicaid recipient.

- Mantoux Tuberculin Skin Test:** Dates and skin test measurement (in millimeters) are required. Measure only the transverse diameter of induration (palpable swelling) across the forearm (perpendicular to the long axis). Do not record as just "positive" or "negative." If there is no documentation of a skin test, but the patient self-reports a past positive, it will be necessary to repeat the test and record the current measurement

Criteria for tuberculin positivity, by risk group

Reaction ≥ 5 mm of induration	Reaction ≥ 10 mm of induration	Reaction ≥ 15 mm of induration
Human immunodeficiency virus (HIV)-positive persons	Immigrants from high prevalence countries	Persons with no risk factors for TB
Recent contacts of tuberculosis (TB) case patients	Injection drug users	
Fibrotic changes on chest radiograph consistent with prior TB	Residents and employees [†] of high-risk congregate settings	
Patients with organ transplants and other immunosuppressed patients (receiving the equivalent of ≥ 15 mg/d of prednisone for 1 mo or more [§] .)	Children younger than 4 yr of age or infants, children, and adolescents exposed to adults at high risk	
	Persons with clinical conditions that place them at high risk	
	Mycobacteriology laboratory personnel	

[§] Risk of TB in patients treated with corticosteroids increases with higher dose and longer duration.

[†] For persons who are otherwise at low risk and are tested at the start of employment, a reaction of ≥ 15 mm induration is considered positive.

- *Reason for Skin Test and referral for treatment:** Specify whether medication is ordered to treat suspect or confirmed active tuberculosis disease, exposure to a current case of infectious tuberculosis, infection in a person with medical risk factors or population risk factors, or other reason. **Contact to a case** means exposure within the past year to an individual with a confirmed or suspected case of infectious tuberculosis. Include the name of the case, if known.

Medical risk factors include medical conditions predisposing a patient to TB disease (e.g. diabetes, immunosuppressive condition, intravenous drug abuse, etc.). *Refer to more complete list below.* **Population risk factors** include demographics that predispose a patient to TB exposure or infection (e.g. employment or residence in a health care facility, correctional institution, homeless shelter, foreign-born from a country with high TB prevalence, etc.). *Refer to more complete list below.*

<u>Medical Risk Factors</u>	<u>Population Risk Factors</u>
HIV infection	Residency or occupation in high-risk congregate settings:
Tuberculin skin test conversion	Prisons and jails
Fibrotic lesions (on chest X-ray) consistent with old, healed TB	Health care facilities
Injection drug use	Nursing homes and long-term care facilities
Diabetes mellitus	Shelters for homeless persons
Immunosuppressive therapy	Birth in a country having a high TB prevalence/incidence:
Chronic renal failure	Immigrants
Hematologic disorders, such as leukemia or lymphoma	Refugees
Malignant neoplasms, such as carcinoma of the head or neck	Students
Weight at least 10% less than ideal body weight	Some migrant workers
Pulmonary silicosis	Socioeconomic predictors of exposure:
Gastrectomy or jejunioileal bypass	Low income
Age \leq 5 years	Inner-city residence
	Migrant labor

3. * **Chest X-Ray:** Dates and results of current chest x-ray (**within past 6 months**) are required. **If the chest x-ray was abnormal or abnormal but stable, submit a copy of the chest x-ray report with the medication request.**
4. **Prior Mantoux tuberculin skin test?** This information is important for patients who are part of a tuberculosis surveillance program (e.g., health care workers, correctional employees or inmates, etc.) in order to determine if the positive test is a recent skin test conversion.
5. **Are there any risk factors for adverse reactions or non-adherence which should be noted?** Include any factors that may increase the patient's risk for adverse reactions or therapy non-adherence.
6. **Prior tuberculosis infection/disease?** This information will identify patients who may have received prior therapy and be at increased risk for drug resistance.
7. **Born outside the United States?** This field is not required but can aid in identifying trends in TB infection and disease.

* **Drug Selection**

Specify which drugs with the prescribed dosage and duration. The dosage recommendations are listed on the back of the form. Keep in mind that the drugs come in the following formulations

Isoniazid	100 or 300 mg tablets
Rifampin	150 or 300 mg capsules
Pyrazinamide	500mg tablets
Ethambutol	100 or 400 mg tablets
Streptomycin	injection
Rifater®	50 mg isoniazid, 120 mg of rifampin, 300 mg of pyrazinamide in one tablet
Rifamate	150 mg isoniazid and 300 mg of rifampin in one tablet

References

Centers for Disease Control and Prevention. Treatment of Tuberculosis, American Thoracic Society, CDC, and Infectious Diseases Society of America. MMWR 2003;52(No. RR-11).

Targeted tuberculin testing and treatment of latent tuberculosis infection. *Am. J. Respir. Crit. Care Med.* 2000;161:S221-S247.