



**TO ALL HEADS OF INSTITUTIONS
AND OFFICES OF THE FREE STATE
DEPARTMENT OF HEALTH**

HEALTH SUPPORT CIRCULAR NO...4....OF 2008 (Revised)

TUBERCULOSIS MANAGEMENT PROGRAM

This circular replaces all previous circulars regarding the treatment of Tuberculosis patients

1) ALTERATIONS TO CURRENT TUBERCULOSIS PROTOCOL:

- a) The regimes are essentially unchanged except that the treatment **must now be taken seven days a week irrespective if a patient is treated at the clinic or is hospitalised.**
- b) Treatment should be given seven days a week in both the intensive and continuation phases
- c) The treatment regimes are still divided into four weight band categories.
- d) Four drug combination tablets are used for the Intensive phase and two drug combinations for the Continuation phase.

2) INJECTABLES

- a) *Streptomycin should be reduced to 750 mg per day to those older than 45 years and should not be given to those over 65 years.
- b) *It should not be given during pregnancy.
- c) Streptomycin should also be given seven days a week but due to the difficulties this will create in the clinics the following decision was taken:-
 - Streptomycin will only be given from Mondays to Fridays if facilities are closed over weekends.

- In this case: the injectable phase will be extended from two to three months to cover for the 16 lost doses over weekends.
- d) The client should receive a **minimum of 56 doses**. Any missed dose during the treatment should be added at the end of intensive phase to ensure a total minimum of 56 doses.
- e) It is important that proper arrangements should be made for patients to have access to daily streptomycin before discharge from a health institution.
- f) Keep strictly to the correct dose and the duration of treatment.

3) DRUG RESISTANT TUBERCULOSIS (MDR / XDR)

- a) The seven day treatment rule also applies to Multi drug resistant TB (MDR-TB) and Extensive drug resistant TB (XDR-TB) treatment.
- b) Injectables to be given for 16 weeks, seven days a week. This amount to a minimum of 112 doses.
- c) If injectables are given only five days a week the period must be extended until a minimum of 112 doses has been given.

4) THE REVISED TUBERCULOSIS PROTOCOLS:

Legend:

Regimen 1: New adult patients who have never been treated for TB or who have been treated for less than 4 weeks in the past.

Regimen 2: Previously treated patients, who either finished, interrupted, failed or relapsed.

Regimen 3: All children aged less than 8 years with active TB (pulmonary or extra-pulmonary). Children who cannot produce sputum are diagnosed with the help of symptoms, clinical examination, skin test and chest X-ray.

**(Note that all severe forms of TB should be treated in hospital.
Guidelines for such cases are more prolonged.)**

Abbreviations:

R = rifampicin

H – isoniazid (INH)

Z = pyrazinamide

E = ethambutol

S = streptomycin.

5) NEW ADULT PATIENTS (REGIMEN 1)

New smear or culture positive patients, new smear negative patients and extra pulmonary tuberculosis patients; age above 8 years and adults.

Table 1

Pre-treatment body weight	Two months initial phase		Four months continuation phase	
	SEVEN (7) days a week		SEVEN (7) days a week	
	RHZE (150,75,400,275)		RH (150,75)	RH (300,150)
30-37 kg	2 tabs		2 tabs	
38-54 kg	3 tabs		3 tabs	
55-70 kg	4 tabs			2 tabs
>71 kg	5 tabs			2 tabs

- Drugs must be taken for at least 6 months
- The patient should be continued on the pre-treatment body weight throughout the treatment period, there is no need to adjust the dosages based on weight gain.
- To improve drug absorption medication, medication should be taken in on empty stomach (at least 30 minutes before meals or two hours after meals).

6) RETREATMENT ADULT CASES (REGIMEN 2)

Retreatment cases (failure, relapse and retreatment after interruption)

Table 2:

Pre-treatment body weight	Two months initial phase		3rd month initial phase	Five months continuation phase			
	SEVEN (7) days a week			SEVEN (7) days a week			
	RHZE	*Streptomycin	RHZE	RH	E	RH	E
	(150,75, 400,275)	(g)	(150,75,400,275)	(150,75)	(400)	(300,150)	(400)
30-37 kg	2 tabs	0.5	2 tabs	2 tabs	2 tabs		
38-54 kg	3 tabs	0.75	3 tabs	3 tabs	2 tabs		
55-70 kg	4 tabs	1.0	4 tabs			2 tabs	3 tabs
>71 kg	5 tabs	1.0	5 tabs			2 tabs	3 tabs

7) CHILDREN WITH TUBERCULOSIS (REGIMEN 3)

- Regime 3 is for treatment of uncomplicated intrathoracic tuberculosis and extra pulmonary tuberculosis such as lymph gland and pleural effusion in children. All children with severe forms of tuberculosis (e.g. TB-osteo, meningitis, spine, peritonitis, miliary TB) **must be referred to hospital for management.**
- Children who are aged above 5 years, should be treated with adult TB regimens.

Table 3

Pre-treatment body weight	2 months initial phase	4 months continuation phase
	SEVEN (7) days a week	SEVEN (7) days a week
	RHZ (60,30,150)	RH (60,30)
3-4 kg	½ tab	½ tab
5-7 kg	1 tab	1 tab
8-9 kg	1½ tabs	1½ tabs
10-14 kg	2 tabs	2 tabs
15-19 kg	3 tabs	3 tabs
20-24 kg	4 tabs	4 tabs
25-29 kg	5 tabs	5 tabs

8) TUBERCULOSIS CHEMOPROPHYLAXIS FOR CHILDREN LESS THAN 5 YEARS OF AGE

Active case finding is recommended for all children less than 5 years of age who are a house hold contact or in close contact with an pulmonary TB patient (irrespective of smear or culture results).

These children should be examined and tuberculosis disease should be excluded by means of a skin test (Mantoux) and if found to be healthy, must be given isoniazid (INH) prophylactic treatment as follows:

Table 4

Pre-treatment body weight for Isoniazid prophylaxis	6 months
	SEVEN (7) days a week
	Dosage of isoniazid (H)100mg tablet (5-10mg/kg)
2-3.9kg	¼ tab
4-9.9 kg	½ tab
10-19.9kg	1 tabs
20-29.9kg	2 tabs

Comment:

- a) 100mg tablet could be crushed and dissolved in syrup and given immediately.
- b) RH (60:30) combination as prophylaxis is not recommended

9) COTRIMOXAZOLE CHEMOPROPHYLAXIS (CPT) FOR HIV POSITIVE PATIENTS

The following categories of patients are eligible for Cotrimoxazole prophylaxis

- a) TB patients tested HIV positive and are staged according to WHO staging, clinical stage 3 or,
- b) have CD4 less than 200 cells/cubic mm or
- c) are HIV positive and have symptomatic HIV disease WHO clinical staging 2, 3, 4 and
- d) have already had pneumocystis carinii pneumonia

9.1) CONTRA-INDICATIONS FOR COTRIMOZAZOLE

- a) Sulpha allergy
- b) First trimester of pregnancy

9.2) GENERAL INFORMATION

- c) Cotrimoxazole to be started two weeks to a month after starting TB treatment depending of the patients' tolerance of the TB treatment.
- a) Close monitoring for side effects is highly recommended.
- b) Cotrimoxazole to be continued while the patient is on anti-TB treatment.
- c) Cotrimoxazole can only be stopped if the CD4 count is more than 200 cell/ cubic mm for two consecutive tests at six months interval

Table 5

COTRIMOXAZOLE CHEMOPROPHYLAXIS DOSE ONCE PER DAY				
Age	Trimethoprin / Sulfamethoxazole (440mg/200mg) Syrup	Trimethoprin / Sulfamethoxazole (20 mg/100 mg) Paediatric Tablet	Trimethoprin / Sulfamethoxazole (80 mg/400 mg)	Trimethoprin / Sulfamethoxazole (160/800 mg)
Less than 6 months	2,5 ml	1 tablet	½ tablet	
6 months up to 5 years	5 ml	2 tablet	1 tablet	
5-14 years	10ml	4 tablet	2 tablet	
>14 years and older			2 tablet	1 tablet

SIGNED BY:

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