

Tuberculosis Medications

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Why is tuberculosis (TB) treatment important?

Treatment will have been ordered by the doctor for one of the following reasons:

- **Treatment for active TB disease.** TB does not always cause the classic symptoms of coughing, weight loss, night sweats and blood-streaked sputum, but these symptoms may develop and death may occur if the disease is not properly treated. Untreated disease also puts others at risk of infection. Prescribed TB treatment must be completed. After only a short time of being on treatment, you may feel much improved, or even very well. However, germs may still be present and only a full course of treatment will kill all germs. TB is an infectious disease and treatment prevents passing the infection on to others.
- **Treatment for latent TB infection, to prevent TB developing** where there is evidence of infection with the TB germ, but no sign of active disease.
- Occasionally anti-tuberculosis drugs are used to treat other types of infection, such as non-tuberculous mycobacterial diseases.

When do I take my tablets?

Medications must be taken without fail as directed by your doctor for successful treatment. Medications are usually given daily, but sometimes they are only given two or three days a week. In this case, they must be taken on the specified days and under direct supervision by either a nurse from the clinic (see page 3, point 13) or another supervisor. Medication should be swallowed (*not chewed*) at the same time each day on an empty stomach (one and a half hours before or after food). Most people find it best to take the medications before bed. All medications should be taken at the same time, but do not need to all be swallowed together.

Which drugs are used to treat TB?

Below is a list of drugs used to treat TB, and their possible side effects. Not all side effects are listed, and your doctor will discuss them in more detail. The medications usually cause no side effects that would prevent their use, but it is important to recognise these, and report them to your doctor if they occur. Reporting any symptoms such as nausea, abdominal pain, yellow eyes, dark urine or pale bowel motions *immediately* is most important, because one or more of the drugs can cause these problems.

INAH (Isoniazid): Small, white tablets of 100 mg strength, which are powerful against the TB germ. They sometimes cause minor symptoms such as irritability, fatigue, lack of concentration or worsening of acne. If these result in mood and behaviour changes, they should be reported *immediately* to your doctor. Weakness, numbness and tingling of hands and feet occasionally occur, especially with poor nutrition or excess alcohol intake. Symptoms such as nausea, abdominal pain, yellow eyes, dark urine or pale bowel motions should be reported immediately, because these may indicate liver toxicity. If you are taking INAH, you will usually also be prescribed pyridoxine (Vitamin B6) in the form of small, white* tablets in 25 mg strength. Isoniazid syrup is available for small children needing a lower dose.

Rifampicin: Capsules or tablets that come in three strengths, 150 mg, 300 mg and 600 mg, and are powerful against the TB germ. The colour varies with different brands and strengths. Rifampicin syrup is available for small children needing a lower dose. This medication can cause red, orange or reddish-brown coloured urine, and occasionally other body fluids, such as tears. This is no cause for concern, but indicates that the drug is getting into the body. You must tell the doctor about *any regular medication* you take, because rifampicin can affect the action of certain drugs, especially warfarin, prednisone and the *oral contraceptive pill*.

If you are taking oral contraceptives, their effectiveness may be decreased and you will need to use other forms of contraception. Remember to tell the doctor if you are on such medications.

Interrupting rifampicin treatment can cause potentially serious side effects, from a flu-like illness (with headaches, fevers and chills) to a serious bleeding disorder with easy bruising and bleeding. *If this occurs, report immediately*, but remember, these symptoms *are rare if tablets are taken as directed* at the proper dose and frequency.

Ethambutol: Tablets come in two strengths, 400 mg which is a large, grey * tablet, and 100 mg which is a small, yellow* tablet. It is important to report any change in your eyesight (such as blurred vision or change in colour vision) when taking this tablet. If you have any kidney disease or if you suffer from gout, report this to your doctor before you start this medication.

Pyrazinamide: These are large, white 500 mg tablets that act strongly against the TB germ in the first stages of treatment. Reporting to your doctor any side effects such as skin rash, fever, vomiting, yellowing of skin or eyes, darkened urine, joint pain or unusual bleeding or bruising is important. If you have gout, please tell your doctor.

Streptomycin: This is given as an injection and used only occasionally. Report to your doctor any symptoms of dizziness, loss of balance, nausea, ringing ears or hearing loss.

Prothionamide: Small, orange* 250 mg tablets, with a smooth surface. Prothionamide is used only occasionally. Side effects of nausea, vomiting and diarrhoea can occur and should be reported.

Cycloserine: 250 mg grey or red* capsules that are rarely used. Important side effects are mood and behaviour changes, and disturbances of concentration and memory.

**Colours of tablets may differ if changed by the manufacturers.*

Which symptoms should I report to my doctor?

Although many side effects are listed above, most people tolerate treatment without side effects.

If you experience any of the following symptoms:

- skin rashes (this could be due to an allergy to the tablets and must be reported immediately)
- other signs of allergy (these include swelling of lips, tongue or eyelids; wheezing; unexplained fever; and mouth ulcers, and must be reported immediately)
- nausea, vomiting, diarrhoea or abdominal pain
- tingling of hands or feet
- visual disturbances
- any other unusual symptoms such as exceptional tiredness, faintness or dizziness

Then it's important to contact:

- a Tuberculosis Control Unit (see location and contact details below)
- your own doctor
- or the nearest hospital immediately.

Further information

Location	Telephone	Location	Telephone
Metro South Clinical TB Service Princess Alexandra Hospital (Brisbane)	3176 4166	Cairns TB Control Unit Cairns Base Hospital	4226 6240
Rockhampton TB Control Unit Rockhampton Base Hospital	4920 6211	Townsville TB Control Unit Townsville General Hospital	4433 2860
Toowoomba TB Control Unit Toowoomba Hospital	4616 6446		

What should I do now?

1. Take the following medications *all together at the same time each day*—not necessarily swallowed all together. Strictly follow the advice, instructions and treatment from medical and nursing staff. Your doctor or nurse should fill out the number of tablets you are taking:

Drug	Dose	Drug	Dose
INAH (Isoniazid)	.....tablets	Prothionamide	.....250 mg tablets
Rifampicin	..... 600 mg tablet 300 capsules 150 capsules	Cycloserine	..... 250 mg tablets
Pyridoxine	..... 25 mg tablets	<i>Others</i>	
Ethambutol	..... 400 mg tablets 100 mg tablets		
Pyrazinamide	..... tablets		

2. Continue taking the medication until advised by the doctor to stop. Remember, medication must be taken every day (unless planned otherwise by doctor), even if you feel well.
3. Most TB treatment regimens are safe during pregnancy and should not be interrupted before discussion with the doctor. It is important to tell the doctor as soon as possible if you become pregnant.
4. Do not change the dosage or interrupt daily treatment.
5. Do not offer the medications to others, even if they have similar complaints. Refer them to a doctor or a Tuberculosis Control Unit.
6. Treatment for TB will be of long duration (a minimum of six months treatment is required to ensure cure). Therefore, you should continue treatment as prescribed even if you are feeling well. This matter can be discussed with your doctor.
7. You will be asked by the Doctor to return regularly for appointments and it is most important that you keep these appointments. If it is impossible for you to attend the appointment, you must tell the Nurse from the TB Unit or your treating doctor so another appointment can be made.
8. The medicines are supplied free of charge through the Department of Health in cooperation with public hospital pharmacies. The principal supplier for Metro South TB Unit is The Princess Alexandra Hospital Pharmacy where the medications may be collected between 9.00am and 4.30pm, Monday to Friday (except Public Holidays). If this is not applicable to you, please discuss your collection point with your doctor. They should be collected regularly (usually on the same day as your appointment with the doctor). If your supply is low, obtain further medications immediately before you run out of stock.
9. If you have any doubts at all about the treatment or the dosage of drugs, contact the Medical or Nursing Staff of the closest TB Control Unit during office hours or your treating doctor.
10. Contact your doctor or TB Control Unit immediately if you have any side effects.
11. Remember to bring all your medications and empty bottles with you when you attend for your Doctor's appointment. Keep the medications out of reach of children and in a cool dry place.
12. A nurse from a TB Control Unit will be assigned to your care while you are taking these medications. The nurse will contact and/or visit you regularly whilst you are taking these medications to monitor your progress and will be available to discuss any concerns regarding the management of the disease.
13. There are many reasons why your doctor may plan supervised treatment for you, such as to closely monitor side effects. In this case, a supervisor will give your medications at the same time on the specific days.