Tuberculosis (TB)

Summary

- TB is an uncommon infectious disease in Victoria.
- Only people with active TB of the lungs can pass on infection.
- TB can be treated with medication.
- Immunisation against TB is not recommended for the general population of Victoria.

Tuberculosis, commonly known as TB, is an infectious disease caused by infection with the *Mycobacterium tuberculosis* bacterium. Typically TB affects the lungs but it can also infect any other organ of the body. It is spread from person to person through the air when someone with an active infection of the lungs or throat coughs, sings, laughs or sneezes.

Most people infected with TB do not have any symptoms although there is a 10 per cent lifetime risk that symptoms will develop later into an active infection. In people without symptoms, medications can help reduce the risk of the infection developing into active disease. People who are young or elderly or who have weakened immune systems are more prone to active infection.

TB was once the leading cause of death in many countries but effective treatment and prevention programs mean it is now uncommon in the Australian-born population.

**Causes of TB**

TB is spread when a person with an active disease of the lungs or upper airways (nose and throat) coughs, sings, laughs or sneezes. People nearby may breathe in the exhaled bacteria and become infected. The bacteria can settle in the lungs and begin to grow.

From there, the bacteria can move through the blood or lymphatic system to other parts of the body such as the kidney, spine and brain. Although TB infection in the lungs or throat can be spread to other people, TB in other parts of the body is usually not infectious.

An infected person who does not have active disease cannot transmit TB to another person. These people have latent (or ‘sleeping’) TB.

Sometimes, a mother who has active TB disease that has not yet been treated can pass the bacteria to her baby before or during birth (congenital tuberculosis), although this is extremely rare. There have been very few reported cases of this in the world.

**High-risk groups for tuberculosis**

The number of people who get TB in Victoria is low – about 400 cases per year. Most cases are in people who were born overseas. The most common way to catch TB is if you have close contact over a long period of time with somebody who has untreated, active disease in the lungs.

People who are at higher risk of developing active TB infection include:

- migrants and refugees
- Aboriginal people and Torres Strait Islanders (in northern Australia)
- people living with a human immunodeficiency virus (HIV) infection or have acquired immunodeficiency syndrome (AIDS)
- people with weakened immune systems
Symptoms of active TB
Some of the symptoms of active TB infection include:

- persistent cough
- tiredness
- night sweats
- weight loss
- coughing up blood.

Diagnosis of TB
If your doctor thinks you have TB, diagnosis is simple. Methods used to diagnose TB may include:

- medical history
- skin test (the tuberculin skin test using the Mantoux procedure)
- blood test
- a chest x-ray – to show whether TB has affected the lungs
- a sputum test – to see if TB bacteria are present in coughed-up sputum.

You should be tested for TB if you are:

- living with HIV or AIDS
- living or working in close contact with someone who has recently been diagnosed with active TB
- having any TB symptoms.

Treatment for TB
If you have TB, your doctor may prescribe a course of tablets or suggest regular chest x-rays. Active TB infection can be treated with medication, usually at a major public hospital or by a specialist physician. It will take at least six months to cure TB, sometimes longer.

It is very important that you take the full course of treatment. If you don’t, the TB infection might return and will be harder to cure because the TB bacteria might become resistant to the medication.

Side effects of TB medications
Like all medications, your anti-tuberculosis tablets can cause side effects. Your doctor will monitor your progress during treatment to make sure the medication is working. This will usually involve blood, sputum or urine tests and chest x-rays.

Side effects may include:

- nausea or vomiting
- jaundice — yellowish skin or eyes, dark urine (orange/red urine is a normal side effect and is not harmful)
- unexplained fever or tiredness
- tingling (pins and needles) or numbness of hands or feet, or joint pains
- skin rash, itching skin or bruising
- visual changes such as blurred vision or a change in red-green colour vision.

Side effects of specific tuberculosis medications
The different medications used to treat tuberculosis are associated with specific side effects:

- **Isoniazid** – may make you feel tired or nauseous or make you lose your appetite. It can cause numbness or tingling in your hands or feet, but this is rare in well-nourished people.

- **Rifampicin** – can reduce the effectiveness of the contraceptive pill and some other medications. It is important to advise the doctor who prescribes your TB treatment about any other medicines you are taking. Women taking the contraceptive pill may need to discuss other forms of contraception with their general practitioner or an advisor at a family planning clinic. If you have lens implants or wear soft contact lenses, inform your doctor, as rifampicin can stain them. Rifampicin will cause a pinkish/orange discolouration of your urine, saliva and sweat. This side effect is harmless so you should not be concerned.

- **Ethambutol or Myambutol** – can cause visual problems. Your eyesight will be checked during treatment, but you should stop taking the medication if your vision is affected and call your doctor straight away.

- **Pyrazinamide** – can lead to nausea and a loss of appetite. It is usually only taken for the first two to three months of treatment. Consult with your doctor if you develop unexplained rashes, fever, aches or joint pains.

**Some things to note when taking TB medications**

When taking tuberculosis medications, it is important to be aware of a few basic cautions including:

- Report any side effects to your doctor immediately.
- Tell your TB doctor about any other medications you are taking.
- Medication must be taken for long enough to kill all of the tuberculosis bacteria – for a minimum of six months.
- Take your medications regularly and do not stop taking them, even when you feel better. Irregular use can lead to the tuberculosis bacteria becoming resistant to the medications.
- Alcohol can increase drug side effects and toxicity, because both can affect the liver. Avoid drinking alcohol while on tuberculosis treatment.

**Immunisation against TB**

The vaccine against TB is called BCG. It is no longer recommended for the general population of Victoria, nor is it recommended for healthcare workers. It is only recommended for people at high risk of infection.

These people include:

- Aboriginal and Torres Strait Islander babies in high risk regions such as the Northern Territory and Far North Queensland
- babies born to parents who come from countries with a high rate of TB such as Asia, southern and eastern European countries, Pacific Island nations and north and sub-Saharan Africa
- babies born to parents with leprosy (TB and leprosy are caused by similar bacteria)
- children under five who go to live in high risk countries for long periods of time
- children under 16 who are regularly exposed to someone with active TB and who cannot be given preventative treatment.

Immunisation against TB with BCG vaccine should not be used for women who are pregnant, but can be given to women who are breastfeeding.

Speak with your doctor about whether you (or your child) need immunisation against TB.

**Where to get help**

- Your doctor
- Communicable Disease Prevention and Control Unit, Department of Health, Victorian Government Tel. 1300 651 160
- National Immunisation Information Line Tel. 1800 671 811

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