# LATENT TB INFECTION TB DISEASE



### PLAY YOUR PART.

Protect Yourself and Others. **LET'S END TB NOW** 

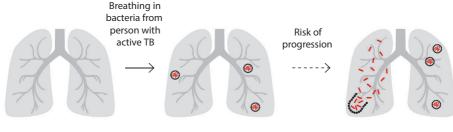


## LATENT TB INFECTION AND TB INFECTION



### What is Latent TB Infection (LTBI)?

Latent TB infection is when a person infected with TB germs does not feel sick and have no symptoms. This means the TB germs are inactive (sleeping) in their body, they are not multiplying or causing their immune system to be weak and they cannot spread TB germs to other people. However, if these germs wake up or become active in your body and multiply, you will get sick with TB disease. The problem with latent TB infection is that at any time without warning, the germs can wake up, becoming active in your body and start to multiply then cause you to get sick with TB disease.



### **Healthy**

You don't have any TB infection

### LTBI

You do not feel sick and you have no symptoms

### **Active TB**

LTBI can become active TB, making you ill and risking infection for those you live with

Many people with latent TB infection are unaware of the danger that may have already quietly settled in them



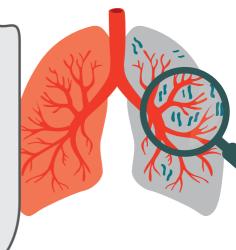
1 out of 10 people with **LTBI** development TB during their lifetime

Overall, without treatment, some people infected with LTB will develop TB disease at some time in their lives. About half of those people who develop TB disease will do so within the first two years of infection. For people whose immune systems are weak, especially those with HIV infection, the risk of developing TB disease is much higher compared to people with healthy immune systems.



### What is TB Disease?

When TB germs are active (multiplying in your body), this is called TB disease. In some people, TB germs overcome the defenses of the immune system and begin to multiply, resulting in the progression from latent TB infection to TB disease. Some people develop TB disease soon after infection, while others develop TB disease later when their immune system becomes weak. These germs usually attack the lungs. They can also attack other parts of the body such as, the kidneys, brain, or spine. TB disease will make you sick. People with TB disease may spread the germs to people they spend time with every day.



### **Symptoms of TB Disease**



Night sweats



Unexplained weight loss



Fatigue



Fever



Feeling weak



Cough



Chest Pains



Loss of appetite

These symptoms may last for several weeks. Without treatment, they usually get worse. Other symptoms depend on the part of the body that is affected. Only a doctor or health worker can tell you if you have TB disease



TB germs are spread through the air when a person with TB disease of the lungs or throat:



The germs can stay in the air for several hours, depending onthe environment.

People close by may breathe in the air containing these germs and can become infected.

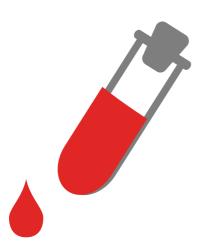
People with TB disease are most likely to spread it to people they spend time with every day, this includes family members, friends, schoolmates and coworkers

### TB is NOT spread by

shaking someone's hand touching bed linens or toilet seats

sharing food or drink sharing toothbrushes

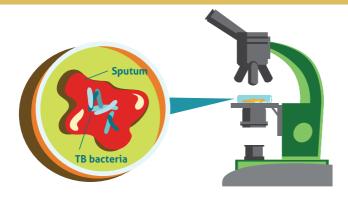
# How do I know if I have latent TB infection or TB disease?



If you have been around someone who has TB disease, you should visit your clinic for a checkup or a test. There are two types of tests that can be done to detect latent TB infection:

- A TB skin test or a TB blood test. The skin test is used most often. A small needle is used to put some testing material under the skin. In 2-3 days, you return to the health care worker who will check to see if there is a reaction to the test.
- In some cases, a TB blood test is used to test for TB infection. This blood test measures how a person's immune system reacts to the germs that cause TB.
- Other tests are required to show if you have TB disease, this include:
- Gene expert (sputum test for those suspected to have TB)
- An x-ray of your chest can tell if there is damage to your lungs from TB. TB disease may be deep inside your lungs.

You may need to be separated from other people until you cannot spread TB germs. This will probably not be for very long, provided you take your medication as your health care worker provider instructs.





### **Preventing TB Infection?**

If you have TB disease the most important way to keep from spreading it is to take all your medication, exactly as directed by your health worker. You also need to keep all of your clinic appointments, your health worker needs to see how you are doing.



Take your medicines as directed, this is very important!



Wash your hands regularly after sneezing, coughing or holding your hands near your mouth or nose.



Always cover your mouth with a tissue when you cough, sneeze, or laugh. Put the tissue in a closed bag and throw it away.



Do not go to work, school and avoid social gatherings, separate yourself from others and avoid close contact with anyone.



Wear a face mask if you are going outside in public.



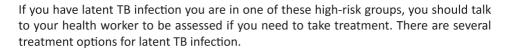
Open the windows, let fresh air and natural light come into your room often (if it is not too cold outside) TB spreads in small closed spaces where air doesn't move. Remember, TB is spread through the air.



### **Latent TB and TB Disease Treatment**

If you have latent TB infection, you may need medicine to prevent getting TB disease later. This is called "preventive" treatment. Some people who have latent TB infection are more likely to develop TB disease than others. Those at high risk for developing TB disease include:

- People staying with someone who has TB disease
- People who are smoking tobacco
- People who became infected with TB germs in the last 2 years
- People with HIV infection
- Babies and young children
- People who inject illegal drugs
- People who are sick with other diseases that weaken the immune system
- Elderly people
- People who were not treated correctly for TB in the past



If you take your medication as instructed, it can prevent you from developing TB disease. Because there are less germs, treatment for latent TB infection is much easier than treatment for TB disease. A person with TB disease has a large amount of TB germs in the body. Several drugs are needed to treat TB disease.

If you have TB disease, it is very important that you finish the medication, and take it exactly as you are advised. If you stop taking the medication too soon, you can become sick again. If you do not take the medication correctly, the germs that are still alive may become difficult to treat with those drugs. It takes at least six months and longer to kill TB germs.







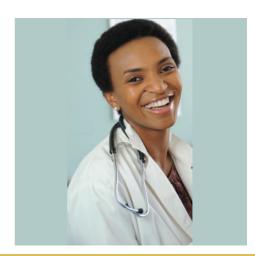
TB germs die very slowly. You will probably start feeling well after only a few weeks of starting treatment. But beware! The TB germs are still alive in your body and you must continue to take your medication until all the TB germs are dead, even though you may feel better and have no more symptoms of TB disease.

If you stop taking your medication or you are not taking all your medication regularly, this can be very dangerous, the TB germs will grow again and you will remain sick for a longer time.

The germs may also become resistant to the medication you are taking and you may need new, different medicines to kill the TB germs if the old medication no longer works.

The new medication must be taken for a longer time and usually have more serious side effects. If you become infectious again, you may spread TB and infect other people. It is very important to take your medicines as directed by your health worker.

TB is the most common cause of AIDS-related deaths worldwide, despite progress in access to antiretroviral treatment. People living with HIV are more likely to develop active TB than those who are HIV negative and therefore treatment of both latent TB infection and TB disease is critical to be taken.



The only way to get well is to take your medication exactly as directed by your health worker. This may not be easy, you will be taking your medication for a long time (6 months or longer), so you should get into a routine. Here are some tips to help you remember to take your medicines:

# O

### **Treatment adherence**



Treatment adherence simply means taking medication, as prescribed, without missing dosages – whether taken in pill form, inhaled, injected, or applied on the skin. Adherence to medication is important to live a healthy and happy life.

### What is non-adherence?

### Some ways people don't adhere to their treatment:

- Not refilling an existing prescription when you are supposed to.
- Stopping a medicine before the instructions say you should.
- Sharing your meds with another person.
- Taking more or less of the prescribed medicine.
- Taking the medicine at the wrong time.
- Mixing treatment with alcohol, imbiza and other unsafe substances.
- Not understanding how to manage side effects.

### Tips for taking your medication:

- Take your pills at the same time every day

   for example, you can take them before eating breakfast, during a regular coffee break, or after brushing your teeth.
- Set an alarm for the time you need to take your medicine.
- Ask a family member or a friend to remind you to take your pills.
- Mark off each day on a calendar as you take your medicine.
- Put your pills in a weekly pill dispenser
- Keep it by your bed or in your purse or pocket

### **Benefits of adherence:**

- Stav healthy
- Avoid multi-drug resistance to TB.
- Be there for the people you care abou and those who care about you.
- Fulfill the dreams you have for yourself, like having a good career, a family or building a house.
- See your children grow up.
- Feel and stay strong and fit
- Work and be functional at home
- Achieve your life goals.



### What to do if you are experiencing side effects?

All effective medication has side effects, because the medicines are strong. Most common side effects will disappear after a few weeks of taking the new medicine.



### **Side Effects**

- Review the checklist of signs and symptoms that may develop if your body does not tolerate this treatment.
- People react differently to medicines.
- Remember that the medicines are strong and that side effects are normal at first, while your body gets used to taking them.
- Side effects usually go away after two to three weeks.
- Do not stop taking your medication or skip doses if you are experiencing side effects.
- If you are experiencing side effects, discuss these with your health care worker, as soon as you can.



#### **Store Your Pills**

- Store your medicine away from children.
- Keep your medicine in one place where you can't miss it.



### Women

- This medication may interfere with hormone based birth control (including birth control pills and shots).
- During treatment, non-hormonal barrier forms of birth control (condoms or diaphragms) should be used to avoid pregnancy.
- If you become pregnant, peak with your doctor or nurse.



### **Limit Alcohol Use**

 Discuss drinking alcohol with your doctor before starting your medicine.





### Speaking with a health worker: Being assertive



### **ACTION STEPS**

Demand to speak to the clinic manager

01

Raise the issue with the clinic committee

02

Find a local support group or start one

03

Nurse: Welcome back. I hope you are taking your medication.

**Patient:** Yes I am, but ..... (interrupted)

Nurse: Here's your pack, see you in

two months.

**Patient:** I'm not coping. I feel sick al

the time.

Nurse: It's normal, you will be ok

after a month.

Patient: I have been taking my treatment

for two months. I am thinking

of stopping.

Nurse: If you stop you die.

Patient: Ok, but I need information

for me not to die.

Nurse: I have a lot of patients outside.

It will get better.

Patient: No, can you explain to me

how 'it will get better'.

If you can't, let me talk to

someone who I can talk to please

### SPEAKING TO SOMEONE YOU CAN TRUST:



**Thato:** When do you take your medication? I never see you.

Mzi: I take it at 8pm. But sometimes I forget.

**Thato:** How can I help? Do you want me to

remind you?

Mzi: I am not a child – I will be fine.

**Thato:** I know. I am concerned. I want to support you.

**Mzi:** It's not just forgetting, I am tired of taking tablets.

I don't feel normal.

**Thato:** Ok, but if it wasn't for this treatment you would be sick.

**Mzi:** Maybe I must talk to someone.

Thato: Yes, and I can go with you or help you

find someone.



### How stigma can affect treatment

External stigma: When people are gossip about or discredit someone on the basis of how they Look, their health status or any other characteristics.

#### **EXTERNAL STIGMA ADVICE**

Avoid places where people talk negatively about your condition or illness. Ignore negative talk.

There are myths about some treatments.

Speak to your nurse or doctor if you are not sure about what you have heard.

### People have their say

"Life comes once." - Lettie

"As a single mother of three, it is my duty to take my meds on time and regularly as prescribed because I have to live for them. I also have my mother and siblings. I owe them my life because they always have my back. I won't give up on them and stop taking my meds." – Lerato

"My goals were never to have HIV. My goals were never to die in that "oh no look it's not her" way. Treatment brought me hope that even on my deathbed, there will be dignity. I don't take treatment to only prolong my life, I am keeping that sense of self and independence throughout." – Nombeko

Internal stigma: It is when a person blames or judges him/herself harshly with feelings of guilt, shame and anger.

#### INTERNAL STIGMA ADVICE

Taking medication is for your health. If you don't want other people to see it, find a private place to take it.

Accept your condition and talk to other people who can support you. This will make it easier to adhere to your treatment.

"I eat food three times every day – I take my medication once a day. So there is nothing difficult

- it is worth my life."
- Glory

"It is simple! If you don't take your meds you die. If you want to make it in life, take your meds. It is the best way." – Nwamati

"I encourage myself by telling myself that I still have a lot to live for. I have my mom and sisters who still need me – plus I have a wife and kids that I love so much. So my 'jelly tots' are keeping me strong every day so I will never ever stop taking them even if I can be offered a million rands every week." – Toni

### Frequently Asked Questions

Updated and consolidated guidelines for programmatic management of LTBI: a critical action to achieve the World Health Organisation (WHO) End TB Strategy targets:

1. Why should I take treatment for latent TB infection when I do not feel sick?

2.Do I need to take TB preventive treatment if I am living with HIV and receiving antiretroviral treatment (ART), and have a high CD4 cell count?

 Should I receive TB preventive treatment if a person in my family has multidrug-resistant TB?

4. What should I do if I develop drug-related adverse events?

5. Who should receive testing and treatment for latent TB?



Remember it can take many years for a person with latent TB infection to get sick, because the bacteria is not active it is dormant (sleeping). As long as you have TB bacteria in your body, they can wake-up, multiply, and make you sick with TB disease. Taking treatment is the only way to kill TB bacteria in your body. Effective drugs are available for the treatment of latent TB and taking a complete course of treatment can prevent the infection from becoming active TB disease.

All adults and adolescents living with HIV should take TB preventive treatment as part of a comprehensive package of care for HIV, regardless of their CD4 cell count. Although regular ART reduces the overall risk of developing TB among people living with HIV (PLHIV), the risk remains very high compared to HIV-negative people. Combined use of TB preventive treatment and ART significantly reduces the risk of TB

Please consult your health-care worker who will make the decision to provide preventive treatment in selected household contacts of patients with multidrug-resistant tuberculosis, if they are regarded as high-risk for developing drug-resistant TB.

If you are receiving treatment for latent TB, and become aware of symptoms such as anorexia, nausea, vomiting, abdominal discomfort, persistent fatigue or weakness, dark-coloured urine, pale stools or jaundice you should immediately visit your clinic. If you cannot visit your clinic at the onset of such symptoms, you should stop treatment immediately until you can visit your clinic.

Adults, adolescents, children and infants living with HIV, infants and children under 5 years who are contacts of TB patients, and HIV-negative clinical risk groups, such as patients initiating anti-TNF treatment (Tumor Necrosis Factor), receiving dialysis, preparing for organ or haematological transplantation have the highest likelihood of developing active TB disease and should be prioritized for systematic testing and treatment of LTBI, regardless of setting or the background TB epidemiology. Additional groups for LTBI testing and treatment are: HIV-negative children over 5 years, adolescents and adults who are contacts of patients with pulmonary TB and contacts of patients multidrug-resistant TB. Systematic testing and treatment of LTBI may be considered for HIV-negative prisoners, health-workers, immigrants from high TB burden countries, homeless persons and people who use illicit drugs, if living in low TB burden settings.

- 6. Should pregnant women living with HIV take TB preventive treatment?
- 7. How can we rule-out active TB in people living with HIV (PLHIV) prior to TB preventive therapy?

8. What TB preventive treatment options are available?

- 9. Should TB preventive treatment be provided by direct observation of treatment (DOT)?
- 10.What can be done to encourage treatmen adherence and support completion of TB preventive treatment?

Pregnant women living with HIV are at risk for TB, which can have severe consequences for both the mother and their unborn child. Pregnancy should not disqualify them from receiving preventive treatment. Sound clinical judgement is required to determine the best time to provide treatment.

Adults and adolescents living with HIV should be screened for TB according to a clinical algorithm and those who report any of the symptoms of current cough, fever, weight loss or night sweats may have active TB and should be evaluated for TB. Those with a negative symptoms screen are unlikely to have active TB and should be offered preventive treatment, regardless of their ART status. Chest radiography may be offered to people living with HIV who are receiving ART. If no abnormal radiographic findings are observed, preventive treatment can be given. However, chest radiography should not be considered a mandatory requirement or be a barrier to initiating TB preventive treatment in people living with HIV.

Visit your clinic to find out and learn more about the available treatment, how it works and how it needs to be taken. Adherence to the full course and completion of treatment are important determinants of clinical benefit, both to the individual and to the success of the programme. Interventions should be tailored to the specific needs of the risk groups and to the local context to ensure adherence and completion of treatment.

All TB preventive treatment options can be self-administered. The selection of treatment options by programmes and clinicians should consider the best modality for treatment provision and monitoring, considering client preference and to ensure that treatment is not only initiated but also completed.

Interventions should be tailored to the specific needs of the risk groups and to the local context to ensure adherence and completion of treatment. Such interventions could include peer support, coaching and educational interventions. Further interventions to support adherence are mentioned in the WHO Guidelines on the treatment of drug susceptible TB, which could be applied to the treatment of LTBI. Shorter latent TB treatment regimens are associated with better adherence and higher treatment completion.

### **HELPLINES**

### AIDS Helpline

The 24-hour hotline provides information on HIV testing, treatment, care and prevention. 0800 012 322

#### SANTA

South African National Tuberculosis Association (SANTA) 011 454 0260

Poor adherence to treatment can lead to less effective viral suppression, being sick contstantly and possibly risking creating permanent damage to your health or resistance to that particular treatment.





