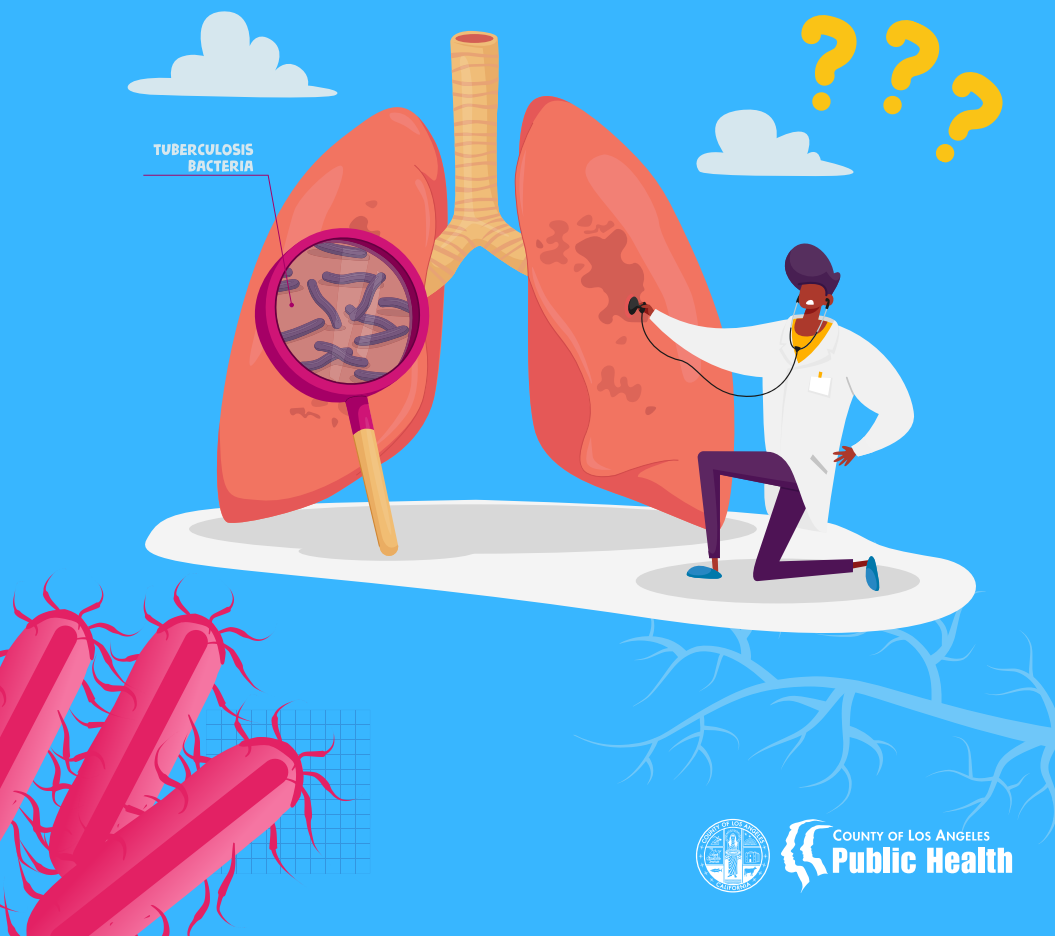


# WHAT IS LATENT TUBERCULOSIS INFECTION (LTBI)?

PATIENT EDUCATION HANDBOOK



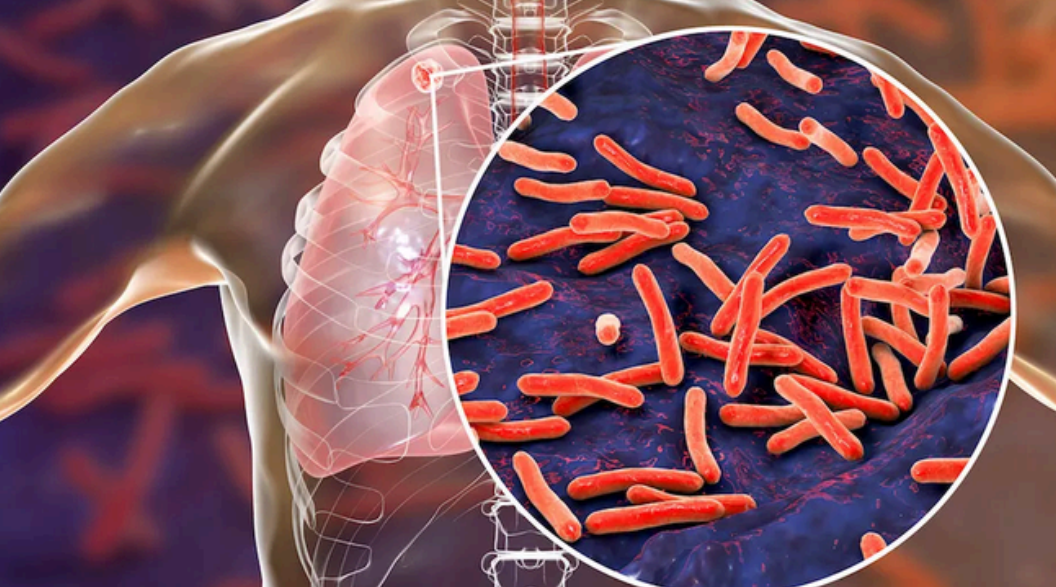
COUNTY OF LOS ANGELES  
**Public Health**



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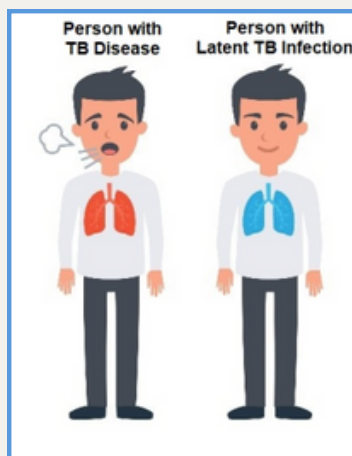


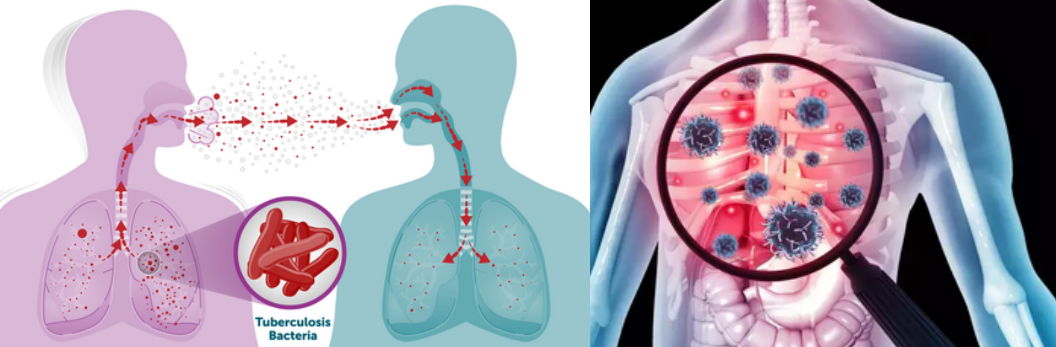
## 1. What is Latent Tuberculosis Infection (LTBI)?

- People with TB infection have the TB germ, but they do not have TB disease. **"Latent"** is another word for **"inactive"** TB infection.
- The germs can hide inside your body and stay "asleep," so you don't feel sick, or spread them to others. But if your body gets weaker, the germs "wake up", become **active**, and make you sick. This is TB disease. Anyone can get the inactive TB germ.
- Treating people with latent **inactive** TB helps keep them from getting sick with TB disease later.

## 2. What is the Difference Between Latent TB Infection and TB Disease?

How is latent tuberculosis (TB) infection different from TB disease?	
A person with latent TB infection:	A person with TB disease:
HAS NO SYMPTOMS	HAS SYMPTOMS
	
DOES NOT FEEL SICK	FEELS SICK
	
CANNOT SPREAD GERMS TO OTHERS	CAN SPREAD GERMS TO OTHERS
	
TREATMENT CAN STOP TB DISEASE FROM OCCURRING	TREATMENT CAN STOP TB DISEASE
	





### 3. How Do TB Germs Enter the Body?

TB germs can spread in the air when a sick person coughs, sneezes, talks, or sings in a room without fresh air.

If you breathe in that air, the germs might get inside you.

At first, the TB germ can stay asleep in your body. This is called "latent TB infection," and it doesn't make you feel sick or spread to other people. But if your body gets weak and can't fight germs well, the TB germ can "wake up" and make you sick. This is called **active** TB disease.

### 4. Who Has an Increased Chance of Getting Latent Tuberculosis Infection (LTBI)?

Anyone can get the inactive TB germ. You're more likely to get it if you have the following risk factors:



Birth, travel, or residence (more than 1 month) in a country with an elevated TB high rate



You are getting ready to start, or are already taking, medicines that reduce your protection against infections, such as cancer treatment



Close contact with someone with infectious TB disease during lifetime



Current or prior homelessness or incarceration

For more information:

[https://www.cdc.gov/tb/media/Question\\_Answers\\_About\\_TB\\_English.pdf](https://www.cdc.gov/tb/media/Question_Answers_About_TB_English.pdf)

<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/TB-Risk-Assessment.aspx>

## 5. How Latent TB Infection is Diagnosed

Testing for latent TB infection helps people stay healthy, especially if they are or have been around someone with **active** TB. Some people only need one test, but others may need a test every year if they work in high-risk situations, have medical conditions, symptoms, or exposure to a person with active TB.

Two types of tests can determine if a person has been infected with TB germs:



**TB blood test**



**TB skin test**

For more information:

[https://www.cdc.gov/tb/testing/blood-test.html#cdc\\_testing\\_how\\_to\\_get\\_tested-how-to-get-tested](https://www.cdc.gov/tb/testing/blood-test.html#cdc_testing_how_to_get_tested-how-to-get-tested)

## 6. Latent TB Infection Treatment

### Why should I to get treated?

When TB bacteria first enter your body, the bacteria (germs) may remain inactive in what's known as a latent TB infection. In this stage, you don't feel ill, show any symptoms, or spread it to others. However, if your immune system weakens, the bacteria can become active leading to TB disease, which makes you sick.

Taking medication for latent TB infection helps kill the TB germs, so they don't "wake up" and make you sick. The medicine keeps you healthy and helps protect your family and friends, too.



For more information:

[https://www.cdc.gov/tb/media/Question\\_Answers\\_About\\_TB\\_English.pdf](https://www.cdc.gov/tb/media/Question_Answers_About_TB_English.pdf)



# 7. How Long Will I Have to Take Latent TB Infection Medicines?

If someone has a latent TB infection, they take medicines to help keep their body healthy. Most people need to take medication for 3 to 4 months. Still, sometimes they take the medicine for 3 to 9 months, depending on the type of active TB exposure, your medical condition, and your doctor’s recommendations.

Some examples of latent TB infection Treatment are:

## LATENT TB INFECTION TREATMENT REGIMENS

	DRUG	DURATION	FREQUENCY	TOTAL DOSES	DOSE AND AGE GROUP
Preferred	ISONIAZID <sup>†</sup> AND RIFAPENTINE <sup>††</sup> (3HP)	3 months	Once weekly	12	<b>Adults and children aged ≥12 yrs</b> INH: 15 mg/kg rounded up to the nearest 50 or 100 mg; 900 mg maximum RPT: 10–14.0 kg: 300 mg 14.1–25.0 kg: 450 mg 25.1–32.0 kg: 600 mg 32.1–49.9 kg: 750 mg ≥50.0 kg: 900 mg maximum  <b>Children aged 2–11 yrs</b> INH <sup>†</sup> : 25 mg/kg; 900 mg maximum RPT <sup>††</sup> : See above
	RIFAMPIN <sup>§</sup> (4R)	4 months	Daily	120	<b>Adults:</b> 10 mg/kg; 600 mg maximum <b>Children:</b> 15–20 mg/kg <sup>§</sup> ; 600 mg maximum
	ISONIAZID <sup>†</sup> AND RIFAMPIN <sup>§</sup> (3HR)	3 months	Daily	90	<b>Adults</b> INH <sup>†</sup> : 5 mg/kg; 300 mg maximum RIF <sup>§</sup> : 10 mg/kg; 600 mg maximum <b>Children</b> INH <sup>†</sup> : 10–20 mg/kg <sup>†</sup> ; 300 mg maximum RIF <sup>§</sup> : 15–20 mg/kg; 600 mg maximum
Alternative	ISONIAZID <sup>†</sup> (6H/9H)	6 months	Daily	180	<b>Adults</b> Daily: 5 mg/kg; 300 mg maximum Twice weekly: 15 mg/kg; 900 mg maximum
			Twice weekly*	52	
		9 months	Daily	270	<b>Children</b> Daily: 10–20 mg/kg <sup>†</sup> ; 300 mg maximum Twice weekly: 20–40 mg/kg <sup>†</sup> ; 900 mg maximum
			Twice weekly*	76	

Vitamin B6 is commonly given, and in rare cases, other stronger medicines.

For more information: <https://www.cdc.gov/tb/treatment/inactive-tuberculosis.html>



## **What are the common side effects of medicines used to treat latent TB infection?**

All medicines, even vitamins, can sometimes cause side effects, though most people take them without issues. A harmless side effect of the medication rifampin is that it can turn your tears, sweat, and urine an orange-red color. This effect is normal and will fade after you stop treatment. However, it can permanently stain soft contact lenses, so your healthcare provider may advise you to avoid wearing them during treatment.

If you think you are having a side effect, call your healthcare provider or nurse immediately. They may ask you to stop your latent TB medication or come in for follow-up tests.

Common side effects may include:

- Rash
- Nausea
- Vomiting
- Diarrhea
- Fatigue
- Flu-like symptoms
- Dizziness or lightheadedness

## Before starting treatment:

- Be sure to tell your nurse or healthcare provider about all the medicines you're taking. Some medications can interfere with treatment for latent TB and may cause side effects, such as nausea. Sharing this information helps prevent problems and ensures your treatment is safe and effective.



If you use birth control pills, talk to your nurse or healthcare provider before starting any new medication. Some medicines can affect how well birth control works.



Tell your nurse or healthcare provider if you are pregnant, think you might be, or if you are breastfeeding. This helps keep you and your baby safe.



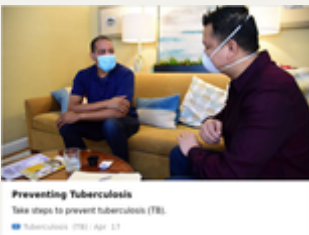
## 8. Importance of Treating Latent TB Infection to Prevent Active TB Disease

Treating latent TB Infection prevents TB disease because:

- If left untreated, 1 in 10 people with latent TB will get sick with active TB disease. Active TB disease can spread to others and can be deadly.
- People who have weak immune systems, or who have diabetes, cancer, or HIV, can get sick from TB more easily. Their bodies have a harder time fighting off the germs that cause TB.
- Most people who get sick from active TB disease did not take medicine for latent TB. Taking medicine early can help keep you healthy later.

## 9. Why Completing All Your Latent TB Infection Medicines is Important

- Latent TB infection means you have TB germs in your body, but you don't feel sick. If your immune system gets weak, the germs can wake up and make you ill. Taking all your medicines helps stop this.
- To get rid of the TB germs in your body, take all your medicines for latent TB.
- Treating latent TB helps stop it from turning into active TB disease. This means it won't spread to other people.
- If you don't finish all your TB medicines, the TB germs can get stronger and harder to kill. This is called drug-resistant TB, and it's harder to treat.



**DON'T SKIP ANY  
DOSES. DON'T STOP  
TAKING YOUR  
MEDICINE EARLY!**

## 10. Foods to Eat While on Latent TB Infection Medications:

Eat healthy foods while taking your latent TB medicine. A good diet helps your body heal faster and makes the medicine work better.



- **Protein-rich foods:**
  - Eggs
  - Beans and lentils
  - Nuts and seeds
  - Lean meats (chicken, fish, turkey)
- **Foods rich in nutrients:**
  - Berries
  - Citrus fruits
  - Dark green leafy vegetables
- **High-calorie foods:**
  - Avocados
  - Cheese
  - Whole milk and yogurt
  - Dried fruits
  - Dark chocolate
  - Granola bars



### Treating Inactive Tuberculosis

Treating inactive tuberculosis is the best way to prevent active TB disease.

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### **Increase intake of fluids like water and coconut water**

The Centers for Disease Control and Prevention (CDC) advises avoiding alcoholic drinks such as wine, beer, and liquor while taking medicine for latent TB infection. Talk to your healthcare provider about any other substances or activities you should avoid during treatment.

## 11. Taking care of you: Exercises, Breathing, and Self-Care

Here are some self-care tips while taking latent TB medications:

### **Schedule of Medications**

Follow your nurse or healthcare provider's directions carefully. Take your medication exactly as prescribed at the correct dose and at the right time.

### **Take with food:**

If your stomach feels upset, talk to your healthcare provider. They might tell you to take your medicines with food.

### **Set reminders:**

Use alarms, pillboxes, or notes to help you remember to take your medications regularly.

### **Keep a list of medications:**

Know what medications you are taking and why.

### **Side effects:**

Please let your nurse or healthcare provider know if you feel any side effects or have questions about your treatment.

### **Wash your hands:**

Wash your hands with soap and water, especially after you cough, sneeze, or use the bathroom.

### **Get enough rest:**

Getting enough sleep helps your body heal and stay strong.

### **Manage stress:**

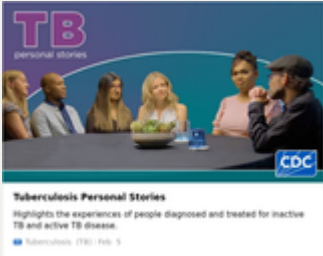
Practice relaxing activities like deep breathing, meditation, or yoga.

### **Keep appointments:**

Make sure to go to all your doctor visits so they can see how you're doing and help you feel your best.

## 12. Patient Tuberculosis Personal Stories

Tuberculosis is still a significant health problem in the U.S. It can happen to anyone, no matter where they come from. These stories tell what it's like to have latent TB infection or active TB disease, and how health workers are trying to stop it.



<https://www.cdc.gov/tb/stories/index.html>



Scan here for Tuberculosis  
Personal Stories

## 13. We are TB: Tuberculosis Survivors & Advocates

We Are TB is a national support and advocacy network led by people who have personally experienced tuberculosis. Their mission is to empower, educate, and connect individuals affected by TB while partnering with clinics and healthcare providers to improve care, support, and outcomes for all. They help patients and doctors by sharing patients' stories to help others understand TB and feel less alone.



<https://www.wearetb.com>



Scan here for We  
are TB webpage



### NTCA Mission

"To protect the public's health by advancing the elimination of tuberculosis in the U.S. through the concerted action of state, local, and territorial programs."

<https://www.tbcontrollers.org>



Scan here for NTCA  
webpage




## FREQUENTLY ASKED QUESTIONS

### 1. Is there a vaccine against Active Tuberculosis?

- Bacille Calmette–Guérin (BCG) is a vaccine for active Tuberculosis (TB) disease that is often given to many people outside of the United States.
- This vaccine is not generally used in the United States because:
  - Of the low risk of infection with TB germs in the United States
  - The variable effectiveness of the vaccine against adult pulmonary TB. You can still get inactive and active TB even with a previous BCG vaccine and
  - The vaccine can make the TB skin test look positive, even if you don't have TB.
- Tell your nurse or healthcare provider you have received the TB vaccine.

### 2. Does the Bacille Calmette–Guérin (BCG) vaccine fully protect me active Tuberculosis?

- The BCG TB vaccine does not protect people from getting active TB disease in the lungs, which is the most common form of the disease in the United States.



*The BCG vaccine is a shot that helps protect people from TB, but this shot doesn't always work the same for everyone. Sometimes it works really well, and other times it doesn't help much at all. That means even if someone gets the BCG vaccine, they can still get sick with TB later on.*



#### Tuberculosis Vaccine

Bacille Calmette–Guérin (BCG) is a vaccine for TB disease. It is not generally used in the U.S.

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<https://www.cdc.gov/tb/vaccines/index.html>

### 3. Do I Need to Isolate if I have Latent TB Infection?

No, people with latent TB infection do not need to stay away from others. They are not contagious and can't spread TB germs. They can go to school, work, and travel like normal. Only people with **active** TB disease can spread the germs to others.



# Public Health Clinic Information

Your Public Health Nurse is:


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Your TB Clinic is:

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TB Clinic Phone Number:

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**DPH Public Health Centers**  
**Nurse Only Clinic Registration Schedule**

All schedules are subject to change and clinics are closed during all [public health emergencies](#). The following schedule reflects registration hours and clinics open 30 minutes after registration begins. Please call ahead to confirm visit hours and to schedule an appointment. Please arrive 15 minutes prior to your appointment.

**Special note: appointments are available on the same day** in patients should arrive as early as possible to improve the likelihood of being seen.

**Nurse Only Clinic services:**

- All childhood immunizations and TB testing
- Adult immunizations for those unimmunized and underimmunized
- TB testing for those in congregate living, school volunteers as well as unimmunized and underimmunized
- COVID-19 testing and testing for all ages
- Flu vaccines
- Hepatitis vaccines

There is a \$15 vaccine administration fee per patient for each visit to our Nurse Only Clinic and \$20.00 for families of two or more. This fee covers all services for that visit. If the child has Medi-Cal or MediCare plan, the cost is free if the patient can provide the Medi-Cal coverage card at the time of registration.

Antelope Valley Health Center	SCHEDULE	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AMF	No Clinic	7:30-11:00	7:30-11:00	8:30-1:00	7:30-11:00
PMF	No Clinic	1:30-5:00	7:30-11:00	7:30-5:30	No Clinic

Address: 155-654THUNDER RD  
LANCASTER, CA 93535

Business Office (818) 475-4802  
(Between Division Street & Griffith Avenue)

Pasadena Health Center	SCHEDULE	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AMF	No Clinic	No Clinic	No Clinic	No Clinic	7:30-11:00
PMF	No Clinic	No Clinic	No Clinic	No Clinic	No Clinic

Address: 11000 River Road Blvd  
Pasadena, CA 91105

Hours: Monday through Friday 10:00 a.m. to 5:00 p.m., 1st Saturday, and 1st Sunday

This clinic is only open on the first Friday of each month.

San Joaquin Valley PHC 3	SCHEDULE	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AMF	7:30-11:00	7:30-11:00	No Clinic	No Clinic	7:30-11:00
PMF	No Clinic	1:00-5:00	No Clinic	1:00-5:00	No Clinic

Address: 11000 RIVER AVE  
MONTICLO, CA 95355

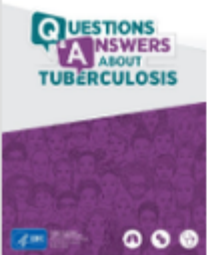
Business Office (925) 256-1800

TB Nurse Clinic Schedule.pdf



Visit the link below to access the most recent and up-to-date TB Nurse Clinic Schedule.pdf or scan the QR Code

<http://ph.lacounty.gov/tb/docs/nurseclinic.pdf>



**Questions and Answers About Tuberculosis Booklet**

Questions and Answers About TB has information on inactive TB and TB disease.

[cdc.gov](http://cdc.gov)



### **Treating Tuberculosis**

Both inactive tuberculosis (TB) and active TB disease can be treated.

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<https://www.cdc.gov/tb/communication-resources/tb-questions-and-answers-booklet.html>





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