

# Tuberculosis (TB) and Latent TB Infection **FACT SHEET**

## What is TB?

Tuberculosis (TB) is a disease caused by a bacteria that is spread through the air from person to person. Although TB most often affects the lungs, it can affect any part of the body including lymph nodes, bones, kidneys, and the brain. TB can cause very severe illness and it can be fatal. Fortunately TB can be prevented, treated, and cured!

## What Are the Symptoms of TB?

Symptoms of TB can include fever, weight loss, night sweats, and fatigue. When TB affects the lungs, symptoms can also include a cough that lasts more than 2-3 weeks, coughing up blood, and chest pain. If you have any of these symptoms you need to see a doctor!

## Is TB a problem in Santa Clara County (SCC)?

Yes. SCC has the third highest number of TB cases among all counties in California, after Los Angeles and San Diego counties. The rate of TB in SCC is over 3 times as high as the national rate. It is estimated that 8.5% of SCC residents have latent TB infection, though most do not know they are infected.

## Who Does TB Affect in Santa Clara County?

TB can infect anyone who lives, works, or breathes in close proximity to someone with active, infectious TB, regardless of their age, race, sex, or socioeconomic status. Over 90% of patients with TB in SCC are born outside of the United States, though most have lived in the United States for more than 5 years. In SCC, the majority of cases occur among persons born in Vietnam, the Philippines, and India.

## How Do You Get TB Infection?

The bacteria that causes TB is spread through the air from person to person when an individual with TB disease involving the lungs or throat coughs, sneezes, or speaks. When people nearby breathe in the bacteria they may become infected, particularly if they are in close or prolonged contact. When someone has been infected, but they do not yet have symptoms or evidence of active TB disease, this is called latent tuberculosis infection (LTBI).

## What is the Difference Between Latent TB Infection (LTBI) and Active TB Disease?

When someone has been infected with the bacteria that causes TB, as long as their body is able to prevent the bacteria from growing, they will have no symptoms or evidence of active TB disease. This is called latent tuberculosis infection (LTBI), which is not contagious to other people.

When the body can no longer prevent the bacteria from growing, the bacteria multiply and cause disease. People with LTBI may develop active TB disease within weeks to many years after becoming infected. People with active TB disease are sick and may be able to spread the bacteria to others if TB affects their lungs or throat. The risk of developing active TB disease is highest among persons with weakened immune systems.

## **You Should Get Tested for Latent TB Infection (LTBI) if You...**

- Were in close or prolonged contact with someone with TB of the lungs or throat
- Were born in a country with an elevated TB rate (i.e. countries other than the United States, Canada, Australia, New Zealand, or Western and Northern European countries).
- Have a condition that is associated with a higher risk of TB including HIV; diabetes; end stage renal disease; head, neck, or lung cancer; leukemia; lymphoma; silicosis; have a history of gastrectomy or jejunioileal bypass; or are significantly underweight.
- Take drugs that weaken your immune system (e.g. chemotherapy, anti-rejection drugs after organ transplant, TNF-alpha inhibitors, oral steroids equal to 15 mg of prednisone or more for at least one month).
- Have injected illegal drugs
- Smoke
- Have worked or stayed in a nursing home, homeless shelter, correctional facility (e.g. prison or jail) or other group setting, or have worked in another type of healthcare facility.

## **How Can I Tell if I Have Latent TB Infection (LTBI)?**

A TB skin test (TST or PPD) or TB blood test (e.g. Quantiferon or T-spot) can be performed to find out if you have TB bacteria in your body.

A “positive” test result means you probably have TB bacteria in your body. Most people with a positive TB skin test or TB blood test have latent TB infection. To be sure that you do not have active TB disease, your doctor will examine you and perform a chest x-ray. You may need other tests to see if you have latent TB infection or active TB disease.

## **What if I’ve Had the BCG vaccine?**

The BCG vaccine (TB vaccine) may help protect young children from getting very sick with TB. This protection goes away as people get older. People who have had BCG vaccine still can get latent TB infection and active TB disease. If you had the BCG vaccine and you have a choice of having a TB blood test or a TB skin test, although either test can be used, it is best for you to have the TB blood test. This is because the TB blood test is not affected by the BCG vaccine. This means that your TB blood test will be “positive” only if you have TB bacteria in your body.

## **What is the Treatment for Latent TB Infection (LTBI)?**

LTBI can be treated with medicine to prevent developing active TB disease. Most often treatment includes a medication called Isoniazid (INH) taken daily for 9 months. A newer regimen, includes two medications, isoniazid and rifapentine, which are taken weekly for 3 months.

## **Why Should I Take Medicine if I Don’t Feel Sick?**

If you have latent TB infection (LTBI), this means that you have TB bacteria living in your body, even though you are not sick. You may develop active TB disease if you do not take medicine to treat LTBI. It is important that you finish your medicine so that the treatment is effective and so that you do not develop drug resistance. Among patients who take medications as prescribed by their doctor, treatment can decrease the risk of developing active TB disease by over 90%.

***For more information on TB, visit <http://www.cdc.gov/tb/topic/basics/default.htm> or contact Santa Clara County Public Health Department.***