



KNOW YOUR RIGHTS: TUBERCULOSIS PREVENTION, DIAGNOSIS, AND TREATMENT

YOUR RIGHTS AND TB PREVENTION

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Page 1 of 4

What is preventive therapy for TB?

You can develop TB infection if you breathe in air from someone who is sick with TB and coughing. Your TB infection may be referred to as latent TB infection or LTBI. TB infection means you have the TB bacteria inside your body, but they are not making you sick. This means you cannot pass the TB germs to others. In many cases, your body is able to keep this TB infection under control and you do not have any symptoms. But in some cases—especially if the immune system is not working properly—TB germs in the body can multiply and make you sick sometime in the future, referred to as active TB disease.

How do I know if I have TB infection?

There are two kinds of tests for TB infection. One is called a tuberculin skin test, or TST. It involves injecting a small amount of harmless protein into your skin (usually in your arm) and asking you to come back a day or two later to see if your skin has reacted, which would mean you have TB infection. The other kind of test is called interferon gamma release assay, or IGRA. An IGRA test looks at a small amount of your blood for signs of TB infection. Having one of these tests may not be necessary for starting preventive therapy if you are at high risk of getting active TB disease. This is because these tests are not perfect. The TST can have a positive result in people who are not infected with TB but have had the BCG vaccine. In some people—especially those who are very young or those whose immune systems are not working well—either the TST or IGRA may have a negative result, even if there is TB infection. Persons who have been exposed to TB in their homes or other places may still benefit from preventive therapy and have the right to discuss this with their health care providers.

What is TB preventive therapy?

Preventive therapy means taking medicines for TB to prevent you from falling sick. Your doctor or nurse may recommend that you take preventive therapy after testing to see if you have TB infection, or after asking about your risk factors. Because the TB infection tests are not very good at telling who will go on to get active TB disease, your doctor or nurse may offer you treatment based only on the risk factors. One risk factor is being in close contact with someone with active TB—all contacts of someone with TB should be screened for TB and, if they have or are likely to have TB infection, should be offered preventive therapy. Another risk factor is having HIV. In fact, the WHO recommends anyone with HIV or children under five years of age who live with someone with TB should be offered preventive therapy (as long as they do not have active disease), even without a TB infection test.

There are several different preventive therapies that work and are safe:

- Six months, nine months, 36 months or lifetime treatment with an anti-TB medicine called isoniazid, taken daily. For people with HIV, this can also be given with cotrimoxazole to prevent other HIV-related conditions;
- Three months of isoniazid plus rifapentine, taken once a week. This is one of the newest options, and many people think it is the easier than other regimens because its duration is shorter and it only has to be taken once a week;
- One month of isoniazid plus rifapentine taken daily. This preventive therapy has only been studied in people with HIV. This is one of the newest options, and many people think it is the easier than other regimens because its duration is short, and people with HIV take daily medicine anyway;
- Three to four months of daily isoniazid plus rifampicin, another anti-TB medicine;
- Four months of daily rifampicin alone.

Please note: if you are taking preventive therapy that includes isoniazid, you should also be given vitamin B6 (also called pyridoxine) to prevent damage to your nerves. If you are taking antiretroviral therapy (ART), your doctor should prescribe with caution preventive therapy that contains rifampicin or rifapentine, since these can interact with common HIV medicines. Rifampicin and rifapentine should not be given to people taking protease inhibitors; they may be safely given to people on efavirenz-, raltegravir-, and dolutegravir-based ART. For more information on TB and HIV drug-drug interactions, please visit: <https://aidsinfo.nih.gov/guidelines/html/1/adult-and-adolescent-arv/367/overview>.

Can preventive therapy work for multidrug-resistant TB (MDR-TB)?

MDR-TB means that the strain of TB is resistant to isoniazid and rifampicin, so the preventive therapy options mentioned above may not work. The WHO recently released updated guidance recommending that preventive therapy may be considered for persons living with someone with MDR-TB. There are several ongoing studies to assess the best treatment for MDR-TB infection. You should ask if any of these studies are being done in your area. In some situations, treatment of MDR-TB infection with medicines such as levofloxacin or moxifloxacin may be offered to individuals at high risk. Preventive therapy options for persons exposed to fluoroquinolone-resistant MDR-TB are currently being explored in observational studies and clinical trials. Given the excellent safety profile of delamanid, it appears to be the most suitable drug and could be considered in persons in high-risk exposure situations on a person-by-person basis. You should discuss the risks and benefits of receiving this medication with your health care providers.

Who should be able to access TB preventive therapy?

The WHO recommends that all people with HIV, and all children under five years of age who live with or are close to someone with TB, take preventive therapy when they do not have active TB disease. This is because children and people with HIV are at very high risk of developing TB if they are exposed to the bacteria. WHO also recommends that preventive therapy may be offered to people five years and over

who live with someone with TB, if they live in countries with high burdens of TB and do not have active TB. Because TB is transmitted through the air, everyone in close contact with a person with TB, or at other high risk for TB (such as working in a mine where you are exposed to silica dust that causes silicosis or living in a prison without proper ventilation) should have access to TB screening.

What if I'm pregnant?

Women who are pregnant are at higher risk for becoming sick with TB than the general population. This is due to changes in the immune system that occur during pregnancy. For this reason, all pregnant women have a right to be assessed for TB during their pregnancy, including checking for symptoms, sending a sputum sample, and/or having a chest X-ray (with lead shielding of the abdomen to protect the fetus). If as a pregnant women you are found to be infected with TB and active disease has been ruled out, you have a right to be given TB preventive therapy. Some small studies have shown that the use of isoniazid during pregnancy could be associated with a risk of liver toxicity for the pregnant woman and both miscarriage or low birth weight. Others have shown that isoniazid is safe to use in pregnancy. Pregnant women should discuss the risks and benefits of isoniazid-based TB preventive therapy with their health care providers, consider possible alternatives (i.e. delaying therapy until after the birth of the child, initiating rifampicin- or rifapentine-based preventive therapy, or increased monitoring during pregnancy), and make a decision about preventive therapy that is consistent with their goals and values. Whatever decision is made, pregnant women have a right to receive high-quality care for themselves and their babies.



Photo Credit: Delek Hospital

Can I be forced to take preventive therapy?

Preventive therapy should never be mandatory. You should always have the choice of taking it (consent) or not. You may encourage an at-risk loved one to take preventive therapy, but it is their choice to take it or not. You have the right to be fully informed about the potential benefits, risks, and existing knowledge about TB preventive therapy. For children, their parent or legal guardian must provide consent to any procedure or medication, including preventive therapy. In some places, the law does not allow children to consent to treatment and medical decisions by themselves. Laws about consent and ages of consent vary. In many countries this is 18 years old, but in some countries it is younger or older.

What if I have side effects while on preventive therapy?

While reactions to TB preventive therapy are usually minor and rare, some are serious. If you are taking isoniazid, the main side effects of concern are liver damage and nerve damage (which vitamin B6 helps prevent). If you are taking rifampicin or rifapentine, the main concerns are skin and hypersensitivity reactions (a flu-like reaction), and liver damage. If you have a history of liver disease, drink more than seven alcoholic drinks per week, are HIV-positive, are pregnant, or delivered a baby within the past three months, you should ask for a liver function test at the start of therapy to make sure you are not at risk.

If you have stomach pain, nausea, vomiting, loss of appetite, fatigue or weakness, weight loss, pale stools, dark-colored urine, or yellowing of the eyes or skin, contact your health care provider immediately, as you could have liver damage. (Rifampicin and rifapentine can dye your body fluids red, brown, or orange; this is normal unless the urine is dark). If you feel any tingling, burning, or numbness in your hands or feet, contact your health care provider immediately; these can be signs of nerve damage. If your health care provider is not available, immediately stop taking preventive therapy while you wait to talk to them.

I am taking care of a family member with TB. What do I need to know?

TB is infectious, but remember, TB can only be passed through the air when someone sick with still-infectious TB (sometimes called smear-positive TB, though smear-negative TB can also be infectious) coughs, sneezes, sings, or shouts. TB is NOT spread through touch, blood, sperm, or vaginal fluids, or through sharing food, utensils, plates, or cups. TB is generally not infectious after two weeks of good treatment. Most transmission (spread) occurs before someone is on effective therapy. Soon after effective therapy starts, the risk of transmission drops dramatically.

We know the most important way to stop the spread of TB is to quickly diagnose all persons with disease, start them on effective therapy, and support them to successfully complete therapy. If you are in close contact with someone with still-infectious TB, try to stay in well-ventilated areas, preferably with sunlight or a UV light, when you are with the person. You should have access to regular TB screening and pay close attention to any signs of TB in yourself. If you do not have TB symptoms, but think you have been exposed to TB, you should have access to preventive therapy.

Different kinds of masks can help stop the spread of TB. Persons living with TB can wear a surgical paper or cloth mask, as these can stop the TB germs that they cough from being spread to the air. If you are caring for someone with TB but you are not sick, a special type of mask needs to be worn to prevent breathing in the TB germs. This is called an N-95 respirator, and it stops germs from getting in. If you do not have TB and are trying to protect yourself, do not wear a regular surgical mask; this is actually worse than wearing no mask.