TREATMENT GUIDELINES FOR HEALTH STAFF

**TUBERCULIN SKIN TESTING AND LATENT TUBERCULOSIS**

Authorized health and wellness staff may evaluate tuberculin skin test results and treat latent tuberculosis as follows:

**Note:**

* Patients with a previous history of tuberculosis or positive tuberculin skin testing should not receive a repeat tuberculin skin test.
* In patients with a history of BCG vaccination, Interferon Gamma Release Assay (IGRA) blood testing is preferred instead of tuberculin skin testing.

Tuberculin skin tests should be interpreted 48-72 hours after intradermal placement according to the following CDC guidelines:

* **<** 5 mm induration – consider negative
* **>** 5 mm induration – consider positive in a patient with HIV infection, recent contacts of active TB patients, patients with fibrotic changes on chest radiograph consistent with prior TB, patients with organ transplants, and other immunosuppressed patients
* **>** 10 mm induration – consider positive in recent immigrants (within the last 5 years) from high-prevalence countries, injection drug users, patients with clinical conditions that place them at high risk: diabetes mellitus, chronic renal failure, some hematologic disorders (e.g., leukemias and lymphomas), other specific malignancies, malnutrition with weight loss of **>**10% of ideal body weight, jejunoileal bypass, and adolescents exposed to adults at high-risk of TB infection
* **>** 15 mm induration – consider positive in a patient with no known risk factors for TB

Note that induration, not erythema, is measured in mm. Tuberculin skin test results should be interpreted without regard to a prior history of BCG vaccination.

A patient with a tuberculosis skin test (TST) conversion as defined above must have a chest x-ray to exclude active pulmonary tuberculosis. If the radiograph is either normal or reveals only granulomas or calcification in the lung and/or regional lymph nodes, then the patient is considered to have Latent Tuberculosis Infection (LTBI).

1. Pharmacologic management of latent tuberculosis infection includes:

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| Isoniazid & Rifapentine\* (3HP)INH 15 mg/kg (max 900 mg) &RPT (rifapentine)>50 kg-900 mg(max 900 mg) | 3 months | Once per week\*\* with direct observation therapy (DOT) or self-administered therapy (SAT) | Preferred regimen with strong recommendation.Treatment recommended for individuals:* >2 years of age
* In persons who have HIV infection, including AIDS\*\*\*

Not recommended for individuals who are:* pregnant or expect to become pregnant within 12 weeks\*\*\*\*
* presumed infected with INH or RIF-resistant TB
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| RifampinRIF 10 mg/kg (max 600 mg) | 4 months | Daily | Preferred regimen with strong recommendation.Pregnancy Category C |

Three additional regimens have conditional recommendations and require daily dosing for 3, 6, or 9 months.

\* Prescribing providers or pharmacists who are unfamiliar with rifampin and rifapentine might confuse the two drugs. They are not interchangeable, and caution should be taken to ensure that patients receive the correct medication for the intended regimen.

\*\* Health care providers can choose the mode of administration as either DOT or SAT. Given ease of DOT in Job Corps setting, this will likely be the preferred option for centers.

\*\*\* 3HP is the recommended treatment of LTBI in persons with HIV infection including AIDS, who are otherwise healthy and not taking antiretroviral medications or are taking antiretroviral medications with acceptable drug-drug interactions with rifampin

\*\*\*\* In pregnancy, consider delaying treatment until after delivery unless high risk for progression to active disease (recent TB exposure, HIV infected)

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1. Educate students about potential side effects and the need to notify a health provider immediately if experiencing flu-like symptoms or other reactions such as nausea, vomiting, abdominal pain, loss of appetite, yellow skin or eyes, dark urine, fever, rash, numbness of hands or feet.

Rifapentine can reduce the effectiveness of hormonal contraceptives; therefore, women who use hormonal contraceptives should add or switch to a barrier method or a long-acting reversible option.
2. Pyridoxine (vitamin B6) supplements need not be given with isoniazid in otherwise healthy youth, unless pregnant.
3. Baseline liver function testing is not routinely necessary in healthy students with no history of liver disease and taking no medications that may alter liver function. Testing is recommended at baseline for students with liver disease, HIV infection, regular alcohol use, and pregnancy. It can be considered for students taking chronic medications that may alter liver function.
4. At any time during treatment, students reporting symptoms suggestive of liver disease should have monitoring of liver function tests.
5. If the original chest film was considered negative and the patient remains asymptomatic, no repeat x-ray is needed at the conclusion of therapy.
6. Record completed treatment regimen in the student health record, and report same to the state or local Public Health Department so the patient will not have to undergo tuberculin testing and LTBI therapy again.

**Note:**  Many local health departments provide evaluation and treatment services for reactive tuberculin skin tests, including chest x-rays and monthly medication at no cost to the center. Some health departments are beginning to utilize IGRA blood tests to guide decision making. Please defer to recommendations from your local health department.

### WHEN TO REFER TO THE CENTER PHYSICIAN

* If measurements of skin test induration are uncertain
* If the student has an abnormal chest x-ray
* If the student has a history of liver disease, pregnancy, HIV infection, or concern regarding potential exposure to a resistant tuberculosis strain
* If the student does not adhere to therapy
* If the student develops symptoms of cough, chest pain, fever, chills or night sweats