

Prevent Tuberculosis (TB) in 4 Steps: A Guide for Medical Providers

1. California Department of Public Health Tuberculosis (TB) Risk Assessment is available here: <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/TB-Risk-Assessment.aspx>

Risk factors that should prompt testing for TB infection include any of the following:

- **Birth, travel, or residence** in a country with an elevated TB rate for ≥ 1 month. Includes any country other than the U.S., Canada, Australia, New Zealand, or countries in western or northern Europe
- **Immunosuppression** (current or planned): HIV infection, organ transplant recipient, treated with TNF-alpha antagonist (e.g., infliximab, others), steroids (equivalent of prednisone ≥ 2 mg/kg/day, or ≥ 15 mg/day for ≥ 2 weeks) or other immunosuppressive medication
- **Close contact** to someone with infectious TB disease during lifetime
- **Homelessness or incarceration:** For adults, residence in a high-risk congregate setting including homeless shelter or correctional facility during lifetime

2. Interferon gamma release assays (IGRA), may include QuantiFERON-TB Gold Plus (QFT) or T-SPOT. IGRAs are not affected by prior BCG vaccination and are preferred over TB skin test (TST) for non-U.S.-born patients.

3. Prior TB treatment: If patient has previously been treated for TB disease or latent TB infection (LTBI), do not repeat IGRA or TST. If there is clinical concern for TB disease or a new TB exposure, evaluate for TB disease using symptom screen, physical exam, and chest x-ray (CXR)

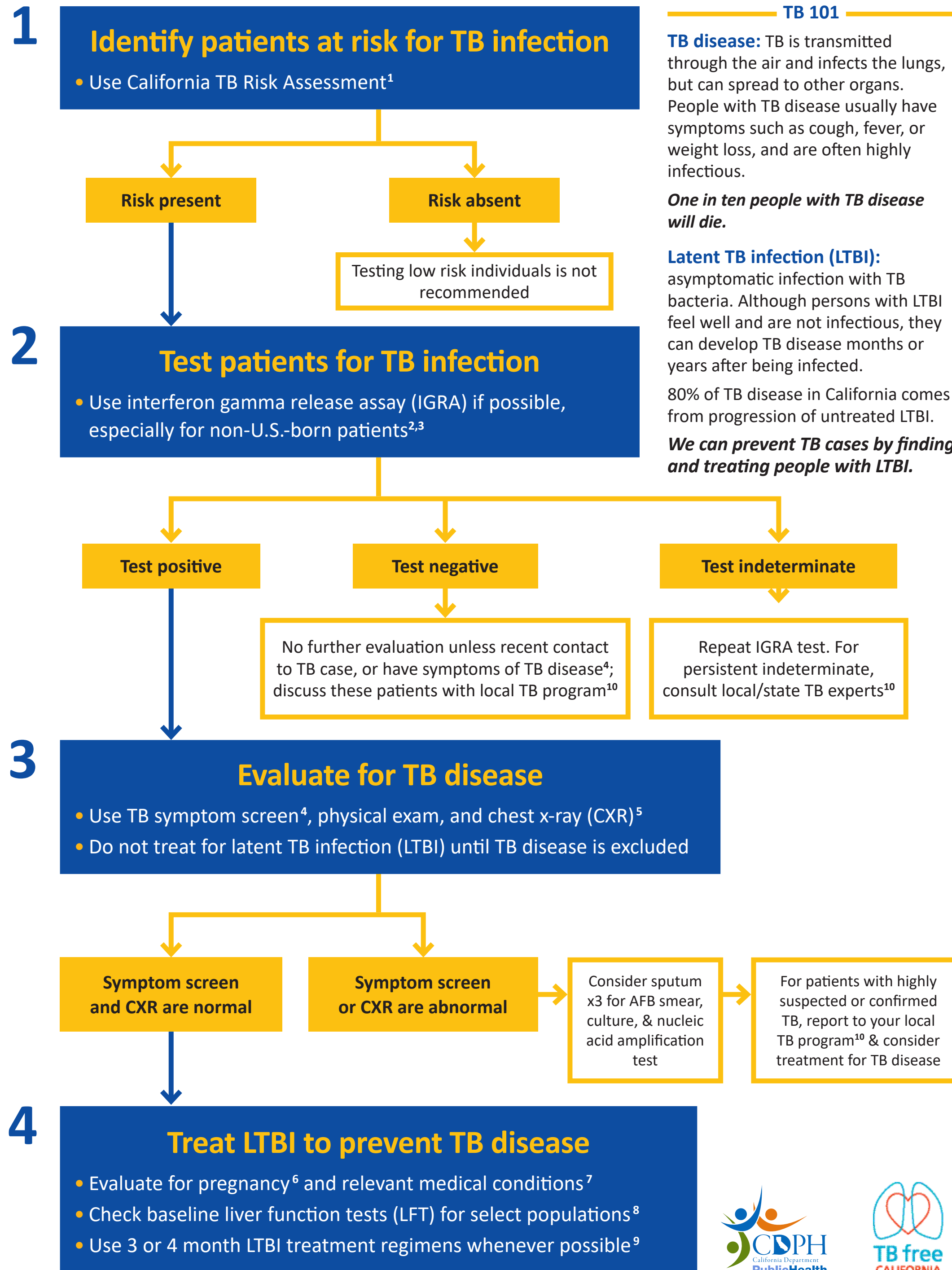
4. TB symptom screen: Patients should be asked about presence of ≥ 2 weeks of any of these symptoms:

- Cough
- Hemoptysis
- Fever
- Night sweats
- Unexplained weight loss

5. CXR: Posteroanterior (PA) view is sufficient for patients ≥ 10 years. For patients < 10 years, obtain both PA and lateral views. CXR abnormalities in TB disease may include infiltrates, nodules, cavitations, effusions, and hilar lymphadenopathy

6. Pregnant patients: Pregnant persons with a positive IGRA or TST should receive prompt evaluation for TB disease including CXR with abdominal shielding. Pregnant persons with LTBI should be treated immediately if they are recent contacts of a TB case, documented new converters, have HIV or significant immune suppression. For other pregnant persons, LTBI treatment can be either started during pregnancy or deferred to postpartum

7. Medical conditions that may increase risk of adverse events during LTBI treatment include HIV infection, liver disease (including cirrhosis, non-alcoholic fatty liver disease, chronic hepatitis B and C), heavy alcohol use, use of hepatotoxic medication, or age > 50 years. Patient with these conditions can still be treated, with baseline lab testing and clinical monitoring



8. Baseline liver function tests (LFT) are needed prior to starting LTBI treatment, for all pregnant patients and those with medical conditions listed in Section 7 (Medical Conditions)

- If ALT is normal, proceed with LTBI treatment, routine LFT testing not needed
- If ALT elevated $\leq 3x$ upper limit of normal, consult MD and consider LTBI treatment with monthly LFT testing
- If ALT $> 3x$ upper limit of normal, consult local or state TB expert prior to LTBI treatment

9. LTBI treatment regimen should be selected based on medical history, drug interactions, and patient preference. 3 or 4 month regimens are preferred. Drug interactions should be carefully reviewed with a clinical drug database or pharmacist; many drug interactions can be managed with close patient monitoring. Current LTBI treatment options include:

- **4 months of daily rifampin (4R):** strongly preferred regimen for adults and children of all ages (HIV-uninfected)
- **3 months/12 weekly doses of isoniazid + rifapentine (3HP):** another strongly preferred regimen, suitable for children age > 2 and non-pregnant adults (including people living with HIV, as drug interactions allow)
- **3 months of daily isoniazid + rifampin (3HR):** preferred regimen for children of all ages and non-pregnant adults (including people living with HIV, as drug interactions allow)
- **9 months of daily isoniazid (9H):** alternative regimen for children and adults; often used in pregnant patients and those with significant drug interaction or intolerance to rifampin/rifapentine, including people living with HIV on antiretroviral therapy
- **6 months of daily isoniazid (6H):** alternative regimen for children and adults

More drug information, including dosing, available here:

<https://www.cdc.gov/tb/topic/treatment/ltbi.htm>

10. For additional support, or to talk to a local or state TB expert, contact:

- Local TB program: <https://ctca.org/directory/>
- State TB Control Branch: (510) 620-3000 or tbcb@cdph.ca.gov
- Curry International Tuberculosis Center: <https://www.currytbcenter.ucsf.edu/>



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