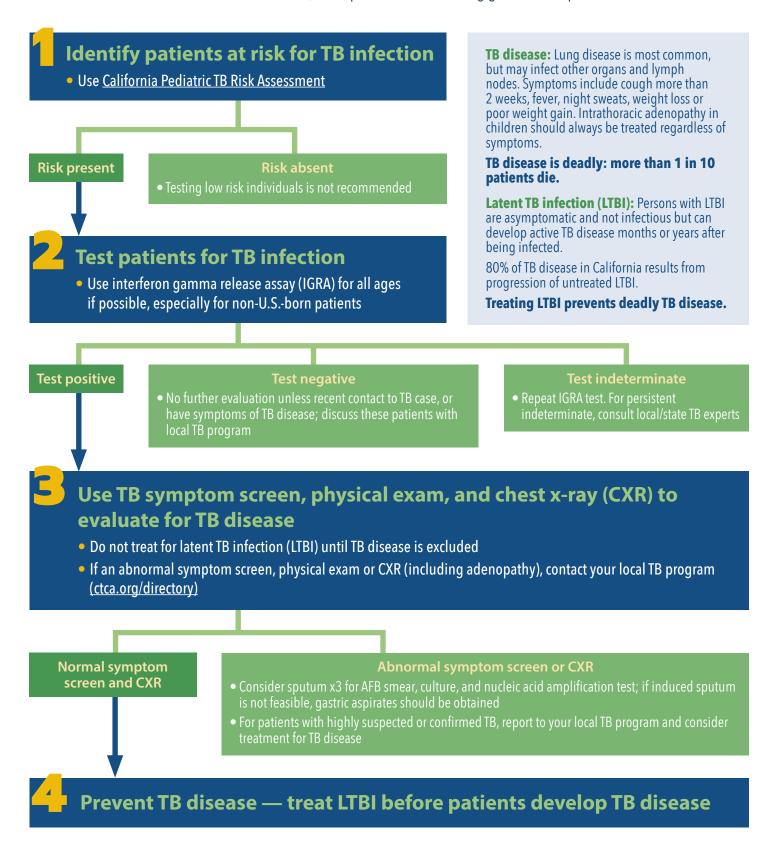
PREVENTING PEDIATRIC TB DISEASE IN 4 STEPS

TB screening is important for children and recommended annually by the American Academy of Pediatrics. The California TB Controllers Association (CTCA) provides the following guidance for pediatric TB evaluation.





Pediatric Latent Tuberculosis Treatment Regimens

Shorter, rifamycin-based treatment regimens are preferred, and more likely to be completed than isoniazid (INH) alone. However, rifampin and rifapentine can interact with oral contraceptives (OCPs), direct oral anticoagulants (DOACs), and other classes of drugs. CTCA recommends using of a drug interaction guide, such as Epocrates or Lexicomp, prior to the initiation of rifamycin-based regimens.

Baseline liver function tests (LFTs) are not routinely needed prior to starting LTBI treatment, but can be considered for children with liver disease or on other hepatotoxic medications.

Regimen	Dosing	Duration	Treatment Considerations
Rifampin (4R)	15-20 mg/kg/day (max 600mg daily)	4 months	
3HP – INH and Rifapentine	INH – max 900mg weekly 25 mg/kg weekly ages 2–11 years 15 mg/kg weekly ages 12 years and older Rifapentine – max 900mg weekly $10.0-14.0 \text{ kg} = 300 \text{ mg}$ $14.1-25.0 \text{ kg} = 450 \text{ mg}$ $25.1-32.0 \text{ kg} = 600 \text{ mg}$ $32.1-50 \text{ kg} = 750 \text{ mg}$ $>50 \text{ kg} = 900 \text{ mg}$	12 weeks	Not for children < 2 years Large pill burden, preferred for children who can swallow pills Monitor for hypersensitivity reaction ² Add pyridoxine (see below)
Rifampin and INH	Rifampin – 15–20 mg/kg/day (max 600 mg daily) INH – 10–15 mg/kg/day (max 300 mg daily)	3 months	Higher risk for hepatotoxicity Add pyridoxine (see below)
INH	10–15mg/kg/daily (max 300mg daily)	6-9 months	Higher risk for hepatoxicity Few drug-drug interactions Add pyridoxine (see below)

Add pyridoxine for the duration of INH-containing treatments for children who are exclusively breastfed, malnourished, or symptomatic and living with HIV, or adolescents who are pregnant

Pyridoxine <25 kg -12.5 mg per dose of INH

25-49 kg-25 mg per dose of INH

≥50 kg or for 3HP - 50 mg per dose of INH

Initiating treatment

- When LFTs are evaluated:
 - If ALT is normal, proceed with LTBI treatment, routine LFT testing not needed
 - If ALT is elevated <3x upper limit of normal, consult MD and consider LTBI treatment with monthly LFT testing

Monitoring while on LTBI treatment

- Monitor child's weight and symptoms monthly for signs of active TB disease or medication toxicity (e.g., peripheral neuropathy or anorexia, fatigue, abdominal pain, nausea/vomiting).
- Serial monitoring labs are recommended for patients with symptoms or evidence of liver toxicity, baseline elevated labs, or higher risk health conditions.

¹ California Department of Public Health, Rutgers Ernest Mario School of Pharmacy, Rutgers Global Tuberculosis Institute, and the Curry International Tuberculosis Center 2022: *Rifamycin Drug-Drug Interactions: A Guide for Primary Care Providers Treating Latent Tuberculosis Infection* (https://www.currytbcenter.ucsf.edu/sites/default/files/2022-12/Rifamycin_2022.pdf)

² National Society of Tuberculosis Clinicians (NSTC), a section of the National Tuberculosis Coalition of America, 2024: Testing and Treatment of Latent Tuberculosis Infection in the United States: A Clinical Guide for Health Care Providers and Public Health Programs (https://www.tbcontrollers.org/resources/tb-infection/clinical-recommendations/)