TUBERCULIN SKIN TESTING IN CHILDREN AND ADOLESCENTS

Risk factors for tuberculosis exposure should be assessed for all children at each routine health care evaluation.

TARGETED TESTING
Only children with increased risk of infection and progression to active tuberculosis should be tested:

IMMEDIATE TESTING
• Contacts of person with confirmed/suspected TB
• Clinical or radiographic evidence suggestive of TB disease
• Recent immigrants (within 5 years) from high-prevalence countries
• Travel history to high-prevalence countries or significant contact with indigenous persons from such countries

ANNUAL TESTING
• HIV-infected children
• Incarcerated adolescents

TEST EVERY 2 TO 3 YEARS
• Exposed to persons who are: HIV infected, homeless, residents of nursing homes, institutionalized, users of illicit drugs, incarcerated or migrant farm workers
• Foster children exposed to adults in above categories

CONSIDER TESTING AT 4-6 AND 11-16 YEARS OF AGE
• Children whose parents or household contacts (with unknown tuberculin skin test status) immigrated from high-prevalence countries
• Children with continued potential exposure by travel to these countries

TESTING NOTES
• Tuberculin skin tests (TST) should be placed and read only by trained healthcare professionals
• Administer 5 tuberculin units (0.1 ml) of purified protein derivative (PPD) intradermally—no multiple puncture tests
• TST can be administered on same day as live virus vaccines or 4 to 6 weeks later
• Previous immunization with bacille Calmette-Guérin (BCG) is NOT a contraindication to tuberculin testing. Therefore, children with risk factors and history of BCG vaccine should be tested

NO RISK = NO TEST

EVALUATION OF CHILDREN AND ADOLESCENTS WITH POSITIVE TST

TREATMENT OF LATENT TUBERCULOSIS INFECTION

LATENT TUBERCULOSIS INFECTION (LTBI) is characterized by:
• Positive tuberculin skin test (TST)
• No symptoms or physical findings suggestive of disease
• CXR – no evidence of active tuberculosis

TREATMENT OF LATENT TUBERCULOSIS INFECTION

Drug
<table>
<thead>
<tr>
<th>Daily Dose</th>
<th>Intermittent*</th>
<th>Length of Treatment</th>
<th>Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isoniazid (INH)</td>
<td>10-15 mg/kg po max: 300 mg per dose</td>
<td>20-30 mg/kg po twice weekly max: 900 mg per dose</td>
<td>9 months (min: 270 doses within 12 months)</td>
</tr>
<tr>
<td>100, 300 mg scored tablet</td>
<td>Daily</td>
<td>Intermittent* (2x/week)</td>
<td>9 months (min: 76 doses within 12 months)</td>
</tr>
</tbody>
</table>

*Directly observed therapy must be used for all intermittent dosing

ALTERNATE TREATMENT REGIMEN: Rifampin at 10-20 mg/kg po daily for 6 months can be given in cases of INH intolerance or for contacts of patients with INH-resistant TB. Drug sensitivities should always be checked when the source case is known. Rifampin will turn urine and other body fluids orange and may stain soft contacts. It may also affect levels of certain other drugs and cause oral contraceptives to be ineffective. Side effects include gastrointestinal upset and rarely, hepatotoxicity.

MONITORING
• Monthly visits recommended to emphasize importance of adherence. Perform brief PE, weight check and monitor for general well being and side effects (anorexia, malaise, abdominal pain, rash, or paresthesias)
• Give only 1-month supply of medication at each visit
• Routine liver function tests are not indicated unless child has history of previous liver disease, is taking other potentially hepatotoxic drugs, or develops possible side effects
• Vitamin B6 is not routinely given except in pregnancy, breast feeding, and milk deficient diet, nutritional deficiency, and symptomatic INH infection

SPECIAL CONSIDERATIONS
Consider consultation with an expert in tuberculosis if child:
• Is HIV infected
• Is immunocompromised
• Has history of liver disease
• Does not tolerate INH or is contact of a patient with INH-resistant TB
• Has signs or symptoms of TB disease such as abnormal CXR, cough, weight loss, anorexia, or change in activity level

TB INFO-LINE: 1-800-482-3627