October 9, 2012
To: Health Care Providers and Schools in Contra Costa County
From: Dr. Charlie Crane, MD, Contra Costa Public Health Tuberculosis Program
Re: Tuberculosis Risk Assessment and Testing for Children

Tuberculosis (TB) remains a problem in California, the United States and the world. In 2010, 83 TB cases were reported in California school-aged (5-17 years) children, representing 3.6% of the total 2,329 California TB cases reported.

As a whole, pre-school and school-age children constitute a low-risk population for TB disease. However, based on current epidemiology in Contra Costa County, certain groups of persons are at higher risk for TB exposure, TB infection and progression to TB disease. In 2011, Contra Costa had three cases of tuberculosis in US-born children ages 3-12 years, transmitted from foreign-born adult relatives with active tuberculosis.

In light of the local epidemiology, Contra Costa Public Health recommends:

1. As part of a routine health assessment, health care providers assess ALL pre-school and school aged children for risk factors for TB exposure and or TB infection. This is called “universal screening” and is done regardless of place of birth or type of insurance. The risk assessment can be accomplished by using a “Pediatric TB Risk Assessment Questionnaire” - sample enclosed.

2. If there are any risk factors for TB exposure or TB infection, then health care providers should appropriately test the child, using either a Mantoux tuberculin skin test (TST)\(^1\) or an Interferon Gamma Release Assay (IGRA)\(^2\). This is called “targeted testing,” and the enclosed Questionnaire contains a Health Care Provider Follow-up section to indicate to the provider when this targeting testing is recommended.

If testing is not indicated for a particular child and the health care provider is completing the Report of Health Examination for School Entry (PM 171A), the health care provider may put “N/A” in the box where it says “Tuberculin Test.”

This policy does NOT affect the State of California’s TB testing requirements for school teachers, staff and volunteers, as that is not subject to local jurisdiction decision.

More information for health care providers is available at cchealth.org/tb/providers.php.

\(^1\) A TST should be performed and interpreted only by health care professionals who have been trained in the proper methods.

\(^2\) Two IGRA’s are available: Quantiferon®-TB and T-Spot®-TB. An IGRA should be used for children > 4 years of age who have had a BCG vaccination. A TST should be used for children < 4 years. Either test is acceptable for all other children.
<table>
<thead>
<tr>
<th>Questions for Parent/Guardian</th>
<th>Health Care Provider Follow-up</th>
</tr>
</thead>
</table>
| **1** Were you or was your child born outside of the United States?  
  Yes ___  No ___  
  If YES, where were you and/or your child born? | If the parent or child was born in Africa, Asia, Latin America, or Eastern Europe, a TST or IGRA should be done. |
| **2** Has your child traveled outside of the US?  
  Yes ___  No ___  
  If YES: Where did your child travel?  
  How long was your child outside the United States? | If the child has been in Africa, Asia, Latin America, or Eastern Europe for 1 month cumulatively, a TST or IGRA should be done. |
| **3** To your knowledge, has your child been exposed to anyone with TB Disease? | If yes, obtain the name of the suspected source case and the circumstances of the contact. Then call CCPH at 925-313-6740 to determine whether that person has TB infection or disease. If confirmed that the child has been exposed to an individual with suspected or known TB disease, a TST or IGRA should be done. |
| **4** To your knowledge, has your child had close contact with a person who has had a positive TB skin test?  
  Yes ___  No ___ | If confirmed that the child has had close contact with a person with a positive skin test, a TST or IGRA should be done. |
| **5** Have you or your child ever resided in a group living setting, such as a homeless shelter?  
  Yes ___  No ___ | If the child has resided in a group living situation since his last TB test, and that test was > 1 year ago, a TST or IGRA should be done. |
| **6** Does your child have any ongoing significant health problems?  
  Yes ___  No ___  
  If YES, what is the nature of that problem? | If the child has a condition associated with an increased risk of progression to TB disease, a TST or IGRA should be done. |

All children with positive test results should have a medical evaluation, including a chest X-ray needed for the diagnosis of TB disease.

Report any confirmed or suspected case of TB disease, and any child < 5 years of age with a positive TST or IGRA to the Contra Costa Public Health Tuberculosis Program at (925) 313-6740. Medical consultation for the evaluation and management of TB infection and disease is also available.

If TB disease is not found, treat children and adolescents with a positive TST or IGRA result with therapy for latent TB infection. For management and treatment guidelines for latent TB infection, refer to http://cchealth.org/tb/providers.php.

---

3 If patient is an adolescent, the questions can be asked directly of the patient.
4 Medical conditions associated with an increased risk of progression to TB disease include: acquired immunodeficiency syndrome (AIDS), a congenital immunodeficiency syndrome, diabetes mellitus, renal failure, malnutrition, or treatment with immunosuppressive medications, including systemic corticosteroids, tumor necrosis factor alpha agonists, cancer chemotherapy or post-transplant chemotherapy.
5 If a child > 4 years of age who has had a BCG vaccination has a positive TST, an IGRA should be performed prior to a medical evaluation and CXR. If the IGRA is negative, the TST result is most likely a false positive result and no further evaluation is needed.