Frequently Asked Questions

A child has history of BCG vaccination, should they have TST or IGRA?

According to the American Academy of Pediatrics Red Book (2012), Interferon Gamma Release Assay (IGRA) is the preferred test for children ≥5 years of age that have a history of BCG vaccination. For children ≤5 years of age, TST is preferred but IGRA is acceptable.

Among TB experts, IGRA blood tests, e.g. QuantiFeron or T-spot, which must be done in the U.S., are reliable for children who are at least 4 years old at the time the blood test is done. There is insufficient data on the sensitivity of IGRA and reports of high indeterminate results among children 0-2 years of age.

Of note, effective March 1, 2014, Medi-Cal removed the age restriction on Medi-Cal reimbursement for IGRA tests for children under 5 years old. The California Department of Health Care Services posted this announcement on their website: "Effective for dates of service on or after March 1, 2014, the minimum patient age for reimbursement with CPT-4 codes 86480 (tuberculosis test, cell mediated immunity antigen response measurement; gamma interferon) and 86481 (tuberculosis test, enumeration of gamma interferon-producing T-cells in cell suspension) is lowered from 5 to 0 years."

Are there ever indications for doing both a TST AND an IGRA?

In general, a provider should choose the appropriate test and avoid doing both tests or using IGRA results to validate positive TST results. A child with a positive result for either TST or IGRA should have a chest X-ray and be treated appropriately.

There are some indications for doing both tests but this should not be routine. If an initial IGRA is indeterminate or borderline, do a TST. Or if an initial test (TST or IGRA) is negative AND there is clinical suspicion for TB disease or risk of infection, progression and poor outcome is higher. For children who are immunocompromised do both tests AND obtain a chest X-ray.

Okay, you said not to, but I did both TST and IGRA and get different results. What do I do now?

Obtain a chest-X ray. If there is a high index of suspicion for active TB disease or risk of progression from infection (i.e. young child, immunocompromised) then treat if either test is positive. If you have questions, please call the TB Prevention and Control Program at (408) 885-4214.

The BCG vaccination may have affected the TST result. What do I do?

Any new TST result ≥10 mm induration will be read as a positive TB screening result regardless of whether or not the child received a BCG vaccination. The student must demonstrate that they are free of communicable disease. In most cases, this will require a chest x-ray done in the United States up to 12 months prior to school registration.

What if the student has a previous positive TST/IGRA from outside the country?

The student will be required to obtain an IGRA and/or undergo a chest x-ray in the United States.

This student left the county for an extended vacation. Do they still need a TB screening test?

If the student has traveled for greater than 1 week to a country in Africa, Asia, Latin America, or Eastern Europe they should be re-evaluated by a healthcare provider and evaluated for possible exposure to TB but this will not be required for school re-entry.

What is considered an adequate regimen for latent TB Infection?

The recommended regimen for latent TB infection is isoniazid for 9 months, usually co-administered with vitamin B6. Children 12 years and older may be considered for weekly dosing of rifapentine and isoniazid by directly observed therapy (DOT) for 12 weeks. An alternate regimen, usually reserved for children exposed to drug resistant TB, is rifampin for six months. See Table on page 7

For review of LTBI treatment regimens other than isoniazid see the table below or contact the TB Prevention and Control Program at (408) 885-4214.

What will be the "Catch-Up" procedure for students who were deferred due to the Tuberculin shortage in 2013?

Students who were tracked because they did not receive a TST or any TB risk assessment evaluation due to the tuberculin shortage should receive instruction to follow-up with their health care provider and undergo TB risk assessment screening assessment. These students should return TB Risk Assessment form prior to starting the 2014-2015 school year.

All other questions regarding the Mandate should be directed to the Public Health Department's TB Prevention and Control Program at (408) 885-4214. Please follow the prompts below to speak with a PHD staff member:

- Press option 1 for English/2 for Spanish then,
- Press option 6 for "All other TB calls" and you will be connected with PH staff prepared to accept your call.

Table. Latent Tuberculosis Infection Treatment Regimens for Children

Drug(s)	Duration	Dose	Frequency	Total Doses
Isoniazid (INH)	9 months	Children: 10-20 mg/kg** Maximum dose: 300 mg	Daily	270
Isoniazid (INH) and Rifapentine (RPT)		Adults and Children 12 and over: INH*: 15 mg/kg rounded up to the nearest 50 or 100 mg; 900 mg maximum RPT*: 10.0–14.0 kg 300 mg 14.1–25.0 kg 450 mg 25.1–32.0 kg 600 mg 32.1–49.9 kg 750 mg ≥50.0 kg 900 mg maximum	Once weekly by DOT †	12
Rifampin (RIF)	6 months	Children: 10-20 mg/kg*** Maximum dose: 600 mg	Daily	120

^{*}Isoniazid (INH) is formulated as 100 mg and 300 mg tablets. Rifapentine (RPT) is formulated as 150 mg tablets in blister packs that should be kept sealed until usage.

References

American Academy of Pediatrics, Committee on Infectious Diseases. Tuberculosis. In L.K. Pickering (Ed.), 2009 *Red Book: Report of the Committee on Infectious Diseases*. 27th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2009:680-701.

Pang J, Teeter LD, Katz DJ, et al. Epidemiology of Tuberculosis in Young Children in the United States. Pediatrics, 2014:494-504.

Pediatric Tuberculosis Collaborative Group. Targeted Tuberculin Skin Testing and Treatment of Latent Tuberculosis Infection in Children and Adolescents. *Pediatrics* 2004; 114 (14):1175-1201.

Centers for Disease Control and Prevention Tuberculosis Information: http://www.cdc.gov/tb/

^{**} The American Academy of Pediatrics recommends an INH dosage of 10-15 mg/kg for the daily regimen.

[†] DOT: Directly observed therapy

^{***}In the United States, the recommended regimen for treatment of LTBI in children is a 9-month course of INH. For the treatment of LTBI in infants, children, and adolescents when INH could not be tolerated or the child has had contact with a case patient infected with an isoniazid-resistant but rifamycin-susceptible organism the American Academy of Pediatrics recommends 6 months of daily rifampin (RIF) (180 doses) at a dosage of 10-20 mg/kg.

Guidelines to Revisions to the School Mandate and Requirements

1) What are the changes to the tuberculosis (TB) screening requirement for school entrance in Santa Clara County?

Students are no longer required to have mandatory TB testing but must undergo a TB risk assessment prior to entering kindergarten or upon transfer to Santa Clara County schools. Each student must now be evaluated by a health care provider who will complete the *Santa Clara County Public Health Department TB Risk Assessment for School Entry* form.

TB risk assessment and test results (if indicated) must be submitted prior to school entry; documented TB screening and tests performed in the US up to twelve months prior to registration for school are considered valid.

Students who have a positive risk assessment should have a TB test. All children with a positive TB test should undergo medical evaluation, including a chest x-ray. The results of the chest x-ray should be included on the form. If the chest x-ray is normal and the child has no TB symptoms, they may start school. If the child has an abnormal chest x-ray, the child must undergo further evaluation and cannot enter school unless treatment has been initiated.

Please fax any forms reporting an abnormal chest x-ray to the TB Prevention and Control Program at (408) 885-2331.

2) How were the risk assessment questions chosen?

The questions on the TB Risk Assessment for School Entry form were adapted from the American Academy of Pediatrics Guidelines and the Pediatric Tuberculosis Collaborative Group recommendations and based on the epidemiology of childhood tuberculosis in Santa Clara County.

3) Who needs to satisfy the requirements of the Santa Clara County TB Mandate?

The requirement applies to the following students entering a public or private school in Santa Clara County beginning June 1, 2014 and later:

- 1. All students entering into kindergarten for the first time.
- 2. All students transferring to Santa Clara County schools into kindergarten through twelfth grade from a school outside of Santa Clara County.

4) Who is exempt from these requirements?

1. All students who have previously met the TB screening requirements of Santa Clara County AND who have not been residing outside the county greater than 12 months; this includes students who entered Santa Clara County schools Transitional-Kindergarten (TK).

2. Students transferring from one school to another within Santa Clara County AND have previously met the TB screening requirements.

5) Who can enroll/register in a Santa Clara County school before TB screening requirements are complete?

A student who falls under the provisions of the McKinney-Vento Homeless Assistance Act is not required to complete TB screening before school registration and may be immediately enrolled into school. TB screening is still required for these students and should be completed in a timely manner, e.g. within 20 calendar days of enrollment. Note: School district may extend time to complete screening for up to 45 calendar days.

6) What are acceptable TB tests?

- 1. Mantoux Tuberculin Skin Test (TST), which must be done in the U.S. A 4-Pronged Tine multipuncture test is not acceptable.
- 2. Interferon Gamma Release Assay (IGRA) blood test, e.g. Quantiferon or T-spot, which must be done in the U.S. (generally recommended for children who are at least 4 years old at the time the blood test is done).

7) What is the definition of a positive TB test?

- 1. A positive TST is 10 millimeters (mm) or more of induration (swelling). Redness alone at the skin test site is not considered a positive reaction.
- 2. A person who has had recent contact to an active infectious TB case will have a positive TST at 5mm or more of induration.
- 3. A positive IGRA result interpretation is included in the laboratory report.

8) What does a positive TB test mean?

A positive TB screening test suggests that the student has been infected with TB. It is important for the student to undergo medical evaluation to determine that they are free of communicable disease and to be offered treatment for latent or "silent" TB infection. Occasionally, a positive TB screening test identifies students with active contagious TB disease. It is important to identify these students early on to prevent the spread of TB in the school system and to ensure that they receive the proper treatment.

9) What is the next step for a student with a positive TST or positive IGRA result? Note: positive means past positive or current positive result

- 1. Students with a positive TST or positive IGRA must submit evidence that they are free of pulmonary TB disease. This includes **one** of the following:
 - a. Report of chest x-ray done in the United States up to 12 months prior to school registration that shows no evidence of active pulmonary tuberculosis.
 - b. Written documentation of prior treatment for latent TB infection. See Table on pg. 7

- c. Written documentation of ongoing treatment for latent TB infection.
- d. Written documentation of prior treatment for active TB disease.
- e. Written documentation of current treatment for active TB disease.
- 2. If the student does not have any of the above and does not have signs or symptoms of active TB (as documented by a medical provider), he/she may be conditionally enrolled, pending the results of the chest x-ray in accordance with school policy. It is recommended that conditional enrollment and admittance be extended for no more than 20 calendar days. However, school districts may extend the time before excluding the student for up to 45 days.

10) What is the next step for a student with an indeterminate IGRA test?

Students who have a positive TB risk assessment, an indeterminate IGRA result and a negative symptom review by a health care provider may enter school.

Note to providers: If result is indeterminate, consider placing a TST or repeating the IGRA test in 2 weeks.

11) What should schools do if a student does not have a health care provider?

If a student does not have a source of regular care, refer to the Child Health and Disability Prevention (CHDP) program at 1(800) 689-6669 or the School Health Clinics of Santa Clara County at (408) 284-2280 to be evaluated.

12) What records must students provide to meet the requirements of the Revised TB Mandate?

- 1. The Santa Clara County Public Health Department TB Risk Assessment for School Entry form completed by a health care provider.
- 2. Students who are currently being treated or have completed treatment for TB or latent tuberculosis infection (LTBI) must provide written documentation from their health care provider. This should include medication name, dosage, date started, and date completed. This student does NOT require an additional chest x-ray.

13) What is the process for obtaining a waiver that exempts a student with a positive risk assessment from the TB test?

- 1. To initiate the process for an exemption for a TB test, a student who has a positive TB risk assessment must have the medical provider write a note on the Santa Clara County TB Risk Assessment for School Entry form. The provider should document that TB testing was deferred due to personal beliefs and that child has no TB symptoms.
- 2. Fax this form to the TB Prevention and Control Program at (408) 885-2331.

Note: The signed back of the blue card is not acceptable for use as a waiver for the TB screening mandate in Santa Clara County.

14) What is the process for obtaining a waiver that exempts a student from the TB screening Assessment?

Students who lack health insurance or a health care provider and who cite these as reasons for obtaining a waiver must still fulfill the requirements of the TB screening before attending school. Refer student to CHDP or the School Health Centers of Santa Clara County.

References

American Academy of Pediatrics, Committee on Infectious Diseases. Tuberculosis. In L.K. Pickering (Ed.), 2009 *Red Book: Report of the Committee on Infectious Diseases*. 27th ed. El Grove Vilage, IL: American Academy of Pediatrics, 2009:680-701.

California Health and Safety Code § 121515.

Centers for Disease Control and Prevention Tuberculosis Information: http://www.cdc.gov/tb/

Pang J, Teeter LD, Katz DJ, et al. Epidemiology of Tuberculosis in Young Children in the United States. Pediatrics, 2014:494-504.

Pediatric Tuberculosis Collaborative Group. Targeted Tuberculin Skin Testing and Treatment of Latent Tuberculosis Infection in Children and Adolescents. *Pediatrics* 2004; 114 (14):1175-1201.