

CTCA POSITION ON TB EVALUATION OF SCHOOL-AGE CHILDREN – 2024 update

Introduction

Pediatric tuberculosis (TB) continues to cause significant morbidity and mortality throughout the world. In California, TB cases in children have generally declined since the early 1990's, but there is some indication of cases increasing over the last two to three years.

(bar graph will be inserted here)

TB affects Asian, Hispanic, Black, Native American, Alaska Native, and Pacific Islander Californians disproportionately. Among children in California from 2017 – 2021, TB rates were 33 times higher in non-Hispanic Asian/Pacific Islander (PI), 19 times higher in Hispanic, and 10 times higher in non-Hispanic Black children compared to non-Hispanic white children. Children with TB (particularly Hispanic and Black children) are more likely to live in the least advantaged neighborhoods (using the California Healthy Places Index). Tuberculosis in California Children

The California Tuberculosis Elimination Plan, 2021-2025 has been developed to promote evidence-based strategies and a timeline to increase latent TB infection (LTBI) testing and treatment among populations at high risk, and to avert preventable deaths, illness, and pediatric TB. <u>California</u> Tuberculosis Elimination Plan, 2021-2025

Universal TB testing of children, independent of risk of exposure, is a low yield and expensive undertaking in California where we have relatively few cases of TB disease when compared with regions outside the US where TB is prevalent. Higher yield activities include evaluation of children who have been in contact with a contagious TB case, or who have symptoms concerning for TB along with new TB risk factors identified through screening during well child primary care visits.

The California TB Controllers Association (CTCA) has recommended risk-based school entry TB testing rather than universal testing since 2012. State health and safety code allows for individual jurisdictions and health officers to determine what, if any, TB screening should be done before school entry. The major benefits for screening are: 1) identifying students who would benefit from LTBI treatment, 2) encouraging screening of families in which children have LTBI and 3) providing information about tuberculosis and promoting LTBI treatment. More study is needed to really quantify the benefit of school entry TB screening.

Primary school aged children less commonly develop tuberculosis disease (compared to infants, toddlers, teens, and adults) and are essentially never contagious when they do develop TB disease. Therefore, while it may be valuable to use the opportunity of school entry to conduct a TB risk assessment and follow-up care if indicated, it is rarely appropriate to exclude children from school

while this evaluation takes place (unless the child has signs or symptoms potentially attributable to infectious TB disease). Ideally, all children would have consistent access to primary care and routine risk-based screening for TB exposure (as recommended by national guidelines). Children at the highest risk for TB exposure and untreated LTBI, including new immigrants, have the greatest difficulty in rapid access into the medical home system. Additionally, not all medical homes have successfully incorporated TB screening into their busy practices. By encouraging TB risk screening through the medical home during the school entry process, we promote equity in child health and TB prevention and treatment for those at highest risk.

The following are updated recommendations by CTCA:

- 1) The TB risk assessment process should promote equity for all students by encouraging families to engage with a primary care medical home for screening for TB risk factors throughout childhood, in addition to other well-child care and health maintenance. The school entry TB risk assessment requirement can be the impetus for general health engagement as well as TB education and TB elimination activities.
- 2) School entry TB screening will be most impactful in areas with the highest number of TB cases. CDPH defines high and very high TB burden jurisdictions as those having 31-99 and 100 or more incident TB disease cases per year respectively. In those jurisdictions, CTCA recommends that the health officer direct school districts to require school entry TB risk assessments.

Ideally, TB risk assessment:

- Should be done in the medical home, where other care is given including vaccines and
 anticipatory guidance. For students who do not yet have established primary care, initial
 TB risk assessment could be performed by a school nurse or in an alternative health care
 setting, with urgent referral to a medical home to establish care and to follow up on a
 positive screen.
- Should follow the <u>California Pediatric Tuberculosis Risk Assessment</u> which outlines the screening questions and details recommendations if the student is identified as having a new risk factor since the last TB test.
- Should be performed within one year before, up to 90 days after date of first school entry to the district from TK/K through 12th grade. Documentation should be submitted by the medical home to the school district using any of the following: jurisdiction specific documentation form, CDPH risk assessment form, or a visit summary indicating that there are no new TB risk factors which are new since the last TB test (if known).
- Should not be required for participation in in-person instruction or school activities and should not lead to school exclusion during the evaluation process unless the child has symptoms concerning for infectious tuberculosis.
- 3) We recognize that there is an administrative burden and potential costs to including TB risk assessment in the school entry process. In low-to-medium caseload TB jurisdictions (< 30 TB cases / year in the entire jurisdiction), the burden of school district involvement in the TB risk screening process may be low yield. Health officers and school districts may conclude that the

addition of school entry TB screening does not add to the health of students and that promoting standard TB risk assessment (CDPH / American Academy of Pediatrics) through the medical home adds more value. TB resources are found at the bottom of this document.

- 4) Local health jurisdictions, school districts and pediatric providers should consider gathering data from TB screening efforts and analyzing health benefits to students, families, and their communities to help inform the impact of school entry TB risk assessment. For example, how many children are identified with TB disease or LTBI, how many complete therapy, etc.
- 5) If a jurisdiction is experiencing a high burden of pediatric TB cases, especially adolescent TB requiring school-based contact investigations, the health officer could consider other strategies such as:
 - o Adding additional middle-school aged TB screening requests (to align with timing of adolescent vaccine requirements).
 - Including TB risk assessment during on-site school health screening for vision and hearing.
 - Adding TB education to family facing communication (print, in person or electronic ideally in a language / culturally specific, health literate manner).

Conclusion

The best public health and medical evidence suggests that <u>universal</u> TB testing is neither necessary nor cost-effective. Instead, targeted testing of children who screen positive using a TB risk assessment through the medical home at each well child visit is the national recommendation (not uniformly implemented). Delays in access to primary care, especially among low-income or recently immigrated families, can delay TB screening. The recommendation to conduct a TB risk assessment at entry into a school district anytime between transitional kindergarten and 12th grade, encourages timely establishment of care within a medical home along with all the benefits of primary care including completion of school-based vaccine requirements.

It is increasingly recognized that our children cannot afford to miss school. Since pre-pubescent children are not contagious when they have TB disease, it would have no value to exclude young students from school pending completion of a TB risk assessment. Children affected by TB are usually Asian/Pacific Islander, Hispanic or Black, usually in families born outside the US. TB screening should promote health and healthy schools and not add to educational disparities.

Most primary care practices have not yet perfected the process of screening for TB risk factors and treating LTBI through the full care cascade (all the steps from risk assessment through treatment). School entry TB risk assessment is an opportunity for local school districts to partner with local health jurisdictions to provide resources to and promote quality improvement through the LTBI care cascade.

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The local health jurisdiction and school districts can provide resources to pediatric medical homes including materials from or link to:

Think. Test. Treat TB Homepage (cdc.gov).

CDPH Risk assessment tools 2024 updates

Patient facing TB infection English

Rifamycin Drug-Drug Interactions: A Guide for Primary Care Providers Treating Latent

Latent TB Videos for Healthcare Providers | Curry International Tuberculosis Center (ucsf.edu)

LTBI Flipbook: A Patient Education Tool | Curry International Tuberculosis Center (ucsf.edu)

<u>Latent Tuberculosis Infection Guideline - CTCA</u>

Preventing Tuberculosis in Your Clinical Setting: A Practical Guidebook

References:

American Academy of Pediatrics, Committee on Practice and Ambulatory Medicine, Bright Futures Periodicity Schedule Working Group. 2020 Recommendations for preventive pediatric health care. Pediatrics. 2020;145(3):e2020200013

Nolt D, Starke JR; AAP Committee on Infectious Diseases. Tuberculosis Infection in Children and Adolescents: Testing and Treatment. Pediatrics. 2021;148(6):e2021054663