

Pediatric Tuberculosis: Key Information for Clinicians

Pediatric tuberculosis (TB) is defined as TB disease in a person less than 15 years of age. It is almost always due to the recent transmission of TB by an adult living in the immediate household.

Children less than two years of age are significantly more likely than adolescents or adults to progress to active TB after infection. They are also more likely to develop life-threatening forms of TB such as TB meningitis or disseminated TB.

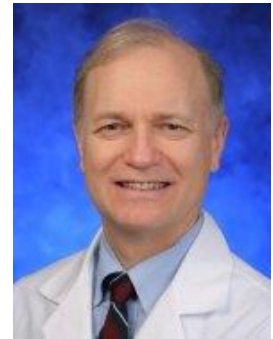
The timeframe between exposure to someone with infectious TB and when there is a sufficient immune system response to be detected by TB tests is typically a 'window period' of eight to ten weeks. Treatment of children and immunocompromised patients of any age during this period is commonly referred to as window prophylaxis¹. The goal of window prophylaxis is to prevent an early yet undetectable TB infection from rapidly developing into TB disease in vulnerable patients.

Children with pediatric TB are often identified during contact investigations². Children younger than five years of age who are contacts to an infectious case of TB are assigned a high priority for TB evaluation and should receive a full diagnostic medical evaluation – including a chest radiograph.

The decision to start a child on window prophylaxis should be based on the results of the medical evaluation, whether the child has any other immunocompromising medical conditions, and the length of time since the child was last exposed to the infectious case.

Isoniazid (INH) is the first-line medication for window prophylaxis in children, but if the source patient's drug susceptibility tests are available and indicate INH resistance, other medications to which the isolate is susceptible should be used to treat the child.

When evaluating a child exposed to an active case of TB, private and public health physicians in Pennsylvania are strongly encouraged to contact the PA TB Program at 717-787-6267 to arrange a consultation with Dr. George McSherry, the State Pediatric TB Consultant. This is especially important given the complexity of evaluating children for TB disease and the increased risk for children younger than two years of age to progress to active TB and to develop life-threatening forms of the disease.



- 1 The ATS and the CDC recommend window prophylaxis for children aged <5 years; the American Academy of Pediatrics recommends window prophylaxis for children aged <4 years.
- 2 For more detailed information about the evaluation of contacts, including children less than 5 years of age, see the 2005 CDC "Guidelines for the Investigation of Contacts of Persons with Tuberculosis," which can be found at <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5415a1.htm>.