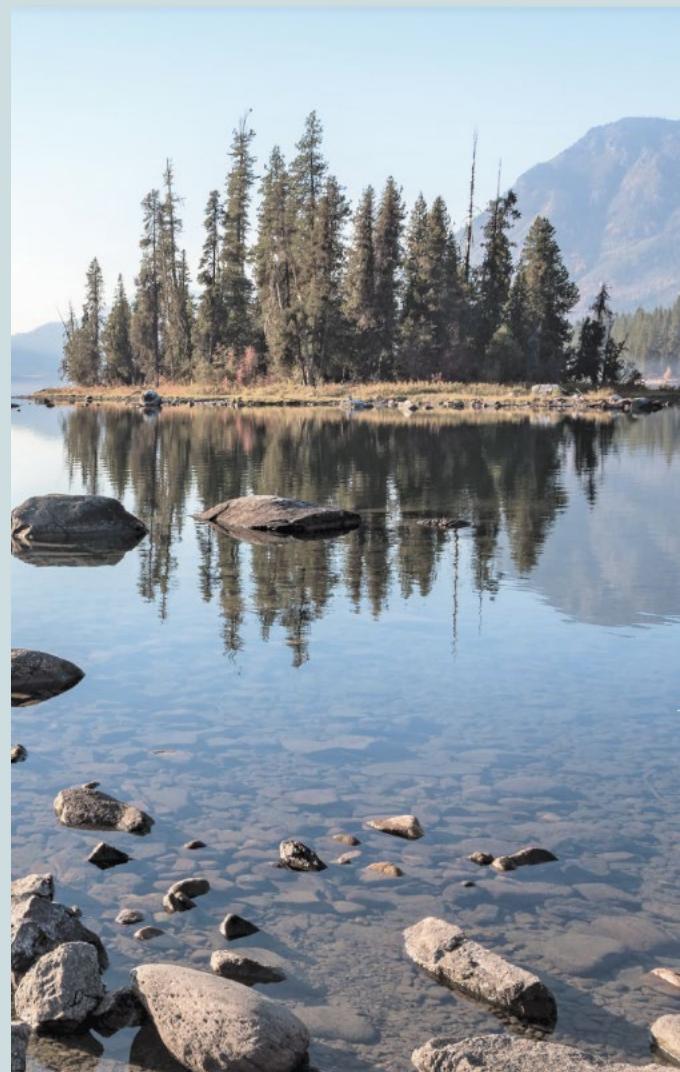


# **Washington State Tuberculosis Services and Standards Manual**

## **Chapter 9: Diagnosis and Treatment of LTBI and TB Disease in Children**



DOH 343-239 May 2024



To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email [doh.information@doh.wa.gov](mailto:doh.information@doh.wa.gov).

## Contact

Washington State Department of Health Tuberculosis Program

Phone: 206-418-5500

Fax: 206-364-1060

[tbservices@doh.wa.gov](mailto:tbservices@doh.wa.gov)

## Acknowledgements

In addition to the multiple resources and references in the **TB Services and Standards Manual** chapters, the Washington State TB Program would like to thank the [Curry International TB Center](#) and the [Alaska State TB Program](#); this manual was adapted from these two resources. The TB Program Team was involved in the initial writing and editing of this manual between 2021 and 2023.

## Table of Contents

<b>About the Washington State TB Services and Standards Manual .....</b>	<b>5</b>
<b>Purpose .....</b>	<b>5</b>
<b>Audience .....</b>	<b>5</b>
<b>Eliminating Stigmatizing Language .....</b>	<b>5</b>
<b>How to Use This Manual .....</b>	<b>6</b>
<b>Icons .....</b>	<b>6</b>
<b>Chapter 9: Diagnosis and Treatment of LTBI and TB Disease in Children.....</b>	<b>8</b>
<b>Introduction.....</b>	<b>8</b>
Purpose .....	8
Background .....	8
Pathogenesis of TB .....	9
Epidemiology of Pediatric TB.....	10
<b>Latent TB Infection (LTBI), Diagnosis and Treatment.....</b>	<b>12</b>
Diagnosis of LTBI.....	12
<i>Candidates for Testing for TB Infection.....</i>	12
<i>Testing for Mycobacterium Tuberculosis (MTB) Infection.....</i>	14
<i>Use of IGRAs in Children Younger Than Two Years of Age .....</i>	17
<i>BCG Vaccine.....</i>	18
Management of Children with a Positive IGRA or TST .....	19
Treatment of Latent Tuberculosis Infection (LTBI).....	20
<i>LTBI Treatment Regimens and Dosing .....</i>	20
<i>LTBI Treatment Monitoring for Side Effects, Adverse Reactions, Adherence .....</i>	22
<i>Window-Period Prophylaxis.....</i>	24
<b>Diagnosis of TB Disease .....</b>	<b>26</b>
Medical History .....	26
Physical Examination .....	26
Radiology.....	27
Bacteriologic Testing.....	28
<i>Specimen Collection.....</i>	30
<i>Gastric Aspirates.....</i>	31
<i>Bronchoscopy .....</i>	31
<b>Treatment of TB Disease.....</b>	<b>32</b>
Basic principles.....	32
Treatment Regimens, Dosages and Duration of Treatment .....	33
<i>Regimens for Fully Susceptible TB.....</i>	33
<i>TB drug dosages in children.....</i>	33
<i>Therapy for Presumed or Known Drug-Susceptible Pulmonary Tuberculosis. ....</i>	34
<i>Duration of Treatment.....</i>	35
<i>Pharmacology and Adverse Reactions.....</i>	37
Monitoring While on TB Treatment .....	39
<i>Medication Side Effects and Adverse Reactions .....</i>	39
<i>Response to Treatment.....</i>	40

Completion of Treatment .....	40
<b>Special Issues.....</b>	<b>40</b>
Drug Delivery Options .....	40
Isolation of Children with TB Disease.....	42
Childcare and Schools.....	42
Children as Contacts to Infectious TB.....	43
<i>Source Case Investigations</i> .....	43
<i>Highest priority contacts based on vulnerability/susceptibility</i> .....	44
Congenital TB .....	45
<b>Resources.....</b>	<b>46</b>