

CADTH RAPID RESPONSE REPORT: SUMMARY OF ABSTRACTS

Treatment of Latent Tuberculosis Infection After Re-Exposure: Guidelines

Service Line: Rapid Response Service

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Research Question

What are the evidence-based guidelines regarding re-treatment of latent tuberculosis infection after exposure to an individual with an active tuberculosis infection?

Key Findings

One evidence-based guideline was identified regarding re-treatment of latent tuberculosis infection after exposure to an individual with an active tuberculosis infection.

Methods

A limited literature search was conducted by an information specialist on key resources including Medline via OVID, the Cochrane Library, the University of York Centre for Reviews and Dissemination (CRD) databases, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy was comprised of both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts latent tuberculosis treatment. Search filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, or network meta-analyses, or guidelines. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2014 and June 23, 2020. Internet links were provided, where available.

This report is a component of a larger CADTH Condition Level Review on tuberculosis. A condition level review is an assessment that incorporates all aspects of a condition, from prevention, detection, treatment, and management. For more information on CADTH's Condition Level Review of tuberculosis, please visit the project page (https://www.cadth.ca/tuberculosis).

Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

Table 1: Selection Criteria

Population	Any person who have been diagnosed with a latent tuberculosis infection
Intervention	Re-treatment of the latent tuberculosis infection after exposure to active tuberculosis infection
Comparator	No comparator required
Outcomes	Guidelines and recommendations, type and timing of treatment or precautions required
Study Designs	Health technology assessments, systematic reviews, evidence-based guidelines



Results

One evidence-based guideline¹ was identified regarding re-treatment of latent tuberculosis infection (LTBI) after exposure to an individual with an active tuberculosis infection. No relevant health technology assessments or systematic reviews of guidelines were identified.

References of potential interest that did not meet the inclusion criteria are provided in the appendix.

Overall Summary of Findings

One evidence-based guideline¹ was identified regarding re-treatment of LTBI after exposure to an individual with an active tuberculosis infection. The Public Health Agency of Canada recommends against re-treatment of LTBI in patients without compromised immunity unless there is uncertainty regarding whether the previous course of therapy was completed.¹ Patients with compromised immunity can be considered for re-treatment.¹ These recommendations are conditional and based on very weak evidence.¹

As part of the condition level review, the guideline¹ in this report was previously included in a CADTH report² on guidelines for the treatment of tuberculosis. The detailed critical appraisal of the guideline can be found in that report.²

References Summarized

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-Analyses

No literature identified.

Guidelines and Recommendations

 Canadian tuberculosis standards, 7th edition. Ottawa (ON): Public Health Agency of Canada; 2014: https://www.canada.ca/content/dam/phac-aspc/migration/phac-aspc/tbpc-latb/pubs/tb-canada-7/assets/pdf/tb-standards-tb-normes-ch6-eng.pdf.
 Accessed 2020 Jul 2.

See: Follow-up after LTBI treatment and management following re-exposure, page 19



Appendix — Further Information

Previous CADTH Reports

 Treatment of tuberculosis: a review of guidelines (CADTH Rapid response report: summary with critical appraisal). Ottawa (ON): CADTH; 2020: https://cadth.ca/treatment-tuberculosis-review-guidelines. Accessed 2020 Jul 2.

Guidelines and Recommendations - Re-treatment Not Specified

 Nahid P, Mase SR, Migliori GB, et al. Treatment of drug-resistant tuberculosis.
 An official ATS/CDC/ERS/IDSA clinical practice guideline. Am J Respir Crit Care Med. 2019;299(10):e93-e142.

PubMed: PM31729908

See: Recommendation #21, page e128

 National Intitute for Health and Care Excellence. Tuberculosis (NICE guideline NG33). 2019: https://www.nice.org.uk/guidance/ng33. Accessed 2020 Jul 2.
 See: Recommendation 1.2.4.2

Clinical Practice Guidelines – Unclear Methodology

Communicable disease control manual, chapter 4: tuberculosis, treatment of latent TB infection (LTBI). Vancouver (BC): BC Centre for Disease Control; 2019:
 http://www.bccdc.ca/resource-gallery/Documents/Communicable-Disease-Manual/Chapter%204%20 %20TB/6.0%20Treatment%20of%20Latent%20TB%20Infection%20%28LTBI%29.pdf.
 Accessed 2020 Jul 2.
 See: 6.1 Overview, page 3

Centers for Disease Control and Prevention. Latent tuberculosis infection: a guide for primary health care providers. 2019:
 https://www.cdc.gov/tb/publications/ltbi/treatment.htm. Accessed 2020 Jul 2.
 See: Special Considerations in the Treatment of LTBI, Contacts

Government of Northwest Territories. NWT tuberculosis manual, section 8: treatment
of tuberculosis. 2014:

https://www.hss.gov.nt.ca/professionals/sites/professionals/files/resources/tb-section-8-follow-up-after-ltbi-treatment-mangement-re-exposure.pdf. Accessed 2020 Jul 2.