

CADTH RAPID RESPONSE REPORT: SUMMARY OF ABSTRACTS

# Contact Tracing for Potential Exposure to Tuberculosis: Guidelines

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**Authors:** Camille Dulong, Melissa Severn, Charlene Argáez

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## Research Questions

What are the evidence-based guidelines regarding contact tracing for people who have been in contact with a person diagnosed with active tuberculosis infection?

## Key Findings

One evidence-based guideline was identified regarding contact tracing for people who have been in contact with a person diagnosed with active tuberculosis infection.

## Methods

A limited literature search was conducted by an information specialist on key resources including PubMed, 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 were contact tracing and tuberculosis and other respiratory illnesses. Search filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, or network meta-analyses, and guidelines. The search was also limited to English language documents published between Jan 1, 2015 and Apr 22, 2020. Internet links were provided, where available.

## Selection Criteria

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

**Table 1: Selection Criteria**

<b>Population</b>	People who have potentially been exposed to a person with active tuberculosis infection
<b>Intervention</b>	Contact tracing for tuberculosis
<b>Comparator</b>	Not applicable
<b>Outcomes</b>	Recommendations regarding how to conduct contact tracing for tuberculosis (e.g., who should be followed up with, when the follow should occur, how the testing should be conducted, what information should be communicated)
<b>Study Designs</b>	Health technology assessments, systematic review and evidence-based guidelines

## Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports with recommendations and systematic reviews of guidelines are presented first, followed by evidence-based guidelines.

One evidence-based guideline<sup>1</sup> was identified regarding contact tracing for people who have been in contact with a person diagnosed with active TB infection. No relevant health technology assessments with recommendations or systematic reviews of guidelines were identified.

Additional references of potential interest are provided in the appendix.

## Overall Summary of Findings

One evidence-based guideline<sup>1</sup> was identified regarding contact tracing for people who have been in contact with a person diagnosed with active TB infection. The guideline by the National Institute for Health Care and Excellence (NICE) recommends that once an individual has been diagnosed with active TB, contact tracing should occur right away without any delay in action.<sup>1</sup> Moreover, NICE recommends assessing symptomatic close contacts for active TB but to not routinely assess social contacts of people with TB, who will include most workplace contacts.<sup>1</sup>

## References Summarized

### Health Technology Assessments

Not literature identified.

### Systematic Reviews and Meta-analyses

No literature identified.

### Guidelines and Recommendations

1. Tuberculosis. NICE Guidelines. London (GB): NICE; 2016 Jan 13: <https://www.nice.org.uk/guidance/ng33/resources/tuberculosis-pdf-1837390683589>. Accessed 2020 Apr 27.  
*See: 1.6.1 Contact Tracing, page 47*

## Appendix — Further Information

### Previous CADTH Reports

2. Budden A, Lee KM, Lam P. Costs of contact tracing activities aimed at reducing the transmission of measles in Canada. Ottawa: CADTH; 2015 May. [https://www.cadth.ca/sites/default/files/pdf/CP0010\\_Measles\\_Contact\\_Tracing\\_Report.pdf](https://www.cadth.ca/sites/default/files/pdf/CP0010_Measles_Contact_Tracing_Report.pdf) Accessed 2020 Apr 27.

### Health Technology Assessments

3. Baxter S, Goyder E, Chambers D, Johnson M, Preston L, Booth A. Interventions to improve contact tracing for tuberculosis in specific groups and in wider populations: an evidence synthesis. *Health Serv Deliv Res* 2017;5(1). <https://njl-admin.nihr.ac.uk/document/download/2009534> Accessed 2020 Apr 27.

### Systematic Reviews and Meta-Analyses

4. Martinez L, Cords O, Horsburgh CR, Andrews JR, Pediatric TBCSC. The risk of tuberculosis in children after close exposure: a systematic review and individual-participant meta-analysis. *Lancet*. 2020 03 21;395(10228):973-984. [PubMed: PM32199484](#)
5. Braganza Menezes D, Menezes B, Dedicoat M. Contact tracing strategies in household and congregate environments to identify cases of tuberculosis in low- and moderate-incidence populations. *Cochrane Database Syst Rev*. 2019 08 28;8:CD013077. [PubMed: PM31461540](#)
6. Parriott A, Malekinejad M, Miller AP, Horvath H, Marks SM, Kahn JG. Yield of testing and treatment for tuberculosis among foreign-born persons during contact investigations in the United States: A semi-systematic review. *PLoS ONE*. 2018;13(7):e0200485. [PubMed: PM30024909](#)
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8. Kotila SM, Payne Hallstrom L, Jansen N, Helbling P, Abubakar I. Systematic review on tuberculosis transmission on aircraft and update of the European Centre for Disease Prevention and Control risk assessment guidelines for tuberculosis transmitted on aircraft (RAGIDA-TB). *Euro Surveill*. 2016;21(4). [PubMed: PM26848520](#)
9. Blok L, Sahu S, Creswell J, Alba S, Stevens R, Bakker MI. Comparative meta-analysis of tuberculosis contact investigation interventions in eleven high burden countries. *PLoS ONE*. 2015;10(3):e0119822. [PubMed: PM25812013](#)

## Randomized Controlled Trials

10. Hanrahan CF, Nonyane BAS, Mmolawa L, et al. Contact tracing versus facility-based screening for active TB case finding in rural South Africa: A pragmatic cluster-randomized trial (Kharitode TB). *PLoS Med.* 2019 04;16(4):e1002796  
[PubMed: PM31039165](#)

## Clinical Practice Guidelines – Methodology Not Specified

11. Communicable Disease Control Manual Chapter 4: Tuberculosis Contact Investigation. Vancouver: BC Centre for Disease Control; 2019 Oct: <http://www.bccdc.ca/resource-gallery/Documents/Communicable-Disease-Manual/Chapter%204%20-%20TB/7.0%20Contact%20Investigation.pdf> Accessed 2020 Apr 27.
12. Health Protection NSW. Tuberculosis contact investigations. North Sydney (AU): New South Wales Ministry of Health; 2019: [https://www1.health.nsw.gov.au/pds/ActivePDS/Documents/GL2019\\_003.pdf](https://www1.health.nsw.gov.au/pds/ActivePDS/Documents/GL2019_003.pdf) . Accessed 2020 Apr 27.
13. Tuberculosis prevention and control protocol, 2018 Toronto: Ministry of Health and Long-Term Care; 2018: [http://www.health.gov.on.ca/en/pro/programs/publichealth/oph\\_standards/docs/protocols\\_guidelines/Tuberculosis\\_Prevention\\_And\\_Control\\_Protocol\\_2018\\_en.pdf](http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/protocols_guidelines/Tuberculosis_Prevention_And_Control_Protocol_2018_en.pdf). Accessed 2020 Apr 27.
14. TB control. Chapter 10: contact investigation. Whitehorse: Yukon Health and Social Services; 2015 May: <http://www.hss.gov.yk.ca/pdf/tbmanual-chapter10.pdf>. Accessed 2020 Apr 27.

## Review Articles

15. Clarke M, Davidson JA, Kar-Purkayastha I. A review of the current public health practice for contact tracing in relation to laryngeal TB in England 2012-2016. *Public health.* 2020 Apr 3;182:110-115.  
[PubMed: PM32251876](#)

## Additional References

16. Digital contact tracing tools for COVID-19. Atlanta (GA): Centers for Disease Control and Prevention; 2020: <https://www.cdc.gov/coronavirus/2019-ncov/downloads/digital-contact-tracing.pdf> Accessed 2020 Apr 27.