

Contact tracing strategies for detecting tuberculosis in people exposed to tuberculosis in low incidence countries

A rapid review

Contact tracing strategies for detecting TB in people exposed in low incidence countries: a rapid review

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Main messages

- The purpose of this rapid review was to identify and assess the available randomised controlled trial (RCT) evidence for the effectiveness of contact tracing strategies for detection of tuberculosis (TB) in people exposed to a person with active TB in low TB incidence countries (search date: up to 27 October 2023).
- 2. Contact tracing strategies were defined as the methods of finding contacts of a person with infectious TB, including risk-assessment approaches informing who to screen.
- 3. In total, 9,794 records from 4 databases and 4 trial registries were screened. No relevant RCT evidence was identified to answer the research question.

Purpose

The purpose of this rapid review was to identify and assess the available evidence from randomised controlled trials for the effectiveness of contact tracing strategies for detection of TB in people exposed to a person with active TB in low TB incidence countries. For the purposes of this review, contact tracing strategies were defined as the methods of finding contacts of a person with infectious TB, including risk-assessment approaches informing who to screen. This review did not address the effectiveness of different methods of testing and treating contacts of TB once they have been identified.

Methods

There was one review question:

1. What is the effectiveness of contact tracing strategies for detection of TB in people exposed to a person with active TB in low TB incidence countries?

A rapid review was conducted, following streamlined systematic methodologies to accelerate the review process (<u>1</u>). A literature search was undertaken to look for relevant RCTs, published (or available as preprint) up to 27 October 2023. In this review, countries with a low TB incidence were defined as any country or territory with an estimated TB incidence rate of less than 40 per 100,000 people, based on World Health Organization 2020 estimates (<u>2</u>). Full details of the methods and search strategy are available in the protocol in <u>Annexe A</u>.

Screening on title and abstract was undertaken in duplicate by 2 reviewers for 20% of the eligible studies, with the remainder completed by one reviewer. Screening on full text was undertaken by one reviewer and checked by a second. Relevant reviews encountered during title and abstract screening were also searched for relevant primary studies.

Evidence

In total, 9,794 records were identified for title and abstract screening. From these, 29 studies were sought for full text review, of which one could not be retrieved (<u>3</u>). None of the 28 studies screened at full text were eligible for inclusion in the review, <u>Annexe B</u> lists these studies and their reasons for exclusion.

Overall, no evidence was found meeting the inclusion criteria for this review.

Limitations

This review was conducted using streamlined methodology, and an extensive search of other sources (such as websites of public health organisations) was not conducted, meaning relevant studies may have been missed. The review was limited to RCT evidence, other evidence may exist that could inform the review question.

Conclusion

No RCTs were identified that assessed the effectiveness of contact tracing strategies for detecting TB in people exposed to TB in low incidence countries.

Acknowledgments

We would like to thank colleagues within the Clinical and Public Health Response Division who either reviewed or input into aspects of the review.

Disclaimer

UKHSA's rapid reviews aim to provide the best available evidence to decision makers in a timely and accessible way, based on published peer-reviewed scientific papers, unpublished reports and papers on preprint servers. Please note that the reviews:

- 1. Use accelerated methods and may not be representative of the whole body of evidence publicly available.
- 2. Have undergone an internal, but not independent, peer review.
- 3. Are only valid as of the date stated on the review.

In the event that this review is shared externally, please note additionally, to the greatest extent possible under any applicable law, that UKHSA accepts no liability for any claim, loss or damage arising out of, or connected with the use of, this review by the recipient or any third

party including that arising or resulting from any reliance placed on, or any conclusions drawn from, the review.

References

- 1. World Health Organization (WHO) and others (2017). '<u>Rapid reviews to strengthen health</u> policy and systems: a practical guide'
- 2. United Kingdom Health Security Agency (UKHSA). <u>WHO estimates of tuberculosis</u> incidence by country and territory, 2020' (viewed on 24 October 2023)
- Stefanescu I. '[Chemotherapy of the source and the risk of infection in home contacts]'. Rev Ig Bacteriol Virusol Parazitol Epidemiol Pneumoftiziol Pneumoftiziol 1976: volume 25, issue 4, pages 201 to 208
- National Institute for Health and Care Excellence (NICE). '<u>Tuberculosis NICE guideline</u> (NG33)' 2019 (viewed on 27 October 2023)
- 5. The Cochrane Collaboration (2019). '<u>Cochrane handbook for systematic reviews of</u> interventions version 6: technical supplement to chapter 4: searching for and selecting studies' (viewed on 25 October 2023)
- 6. The InterTASC Information Specialists' Sub-Group (2023). '<u>Randomized controlled trials</u> and other trials: filters' (viewed on 25 October 2023)
- 7. Sterne JAC and others. '<u>RoB 2: a revised tool for assessing risk of bias in randomised</u> <u>trials</u>'. British Medical Journal 2019: volume 366, page 14,898

Annexe A. Protocol

Review question

The review question is:

1. What is the effectiveness of contact tracing strategies for detection of tuberculosis (TB) in people exposed to a person with active TB in low TB incidence countries?

A search for evidence to answer this review question will be conducted up to 27 October 2023.

Table 1. Eligibility criteria

	Included	Excluded
Population	Contacts of people with TB, as defined by included studies	
Settings	Countries or territories with low TB incidence (estimated incidence rate less than 40 per 100,000 in 2020)	Countries or territories with high TB incidence (estimated incidence rate at least 40 per 100,000 in 2020)
Context	Community settings and institutional settings, for example hospitals, workplaces, prisons, and places of detention	
Intervention or exposure	Contact tracing strategies: methods of identifying contacts of a person with infectious TB, including risk- assessment approaches informing who to screen (for example stone-in-pond approach, social network analysis)	 methods of screening contacts for TB only (for example, symptom screening, microbiological or radiological tests)

	Included	Excluded
	Comparator: any other method of identifying and risk- assessing contacts including usual practice or no contact tracing	 treatment of contacts only (for example vaccination, TB prophylaxis, TB treatment) linkage to care practices and interventions to reduce loss to follow up of contacts only (for example, methods of communicating with contacts)
Outcomes	 proportion of contacts diagnosed with latent or active TB community TB incidence or prevalence TB-related morbidity or mortality (amongst contacts or the community) TB treatment outcomes (amongst contacts or the community) 	
Language	English	Any other language
Date of publication	Up to 27 October 2023	
Study design	 randomised-controlled trials, including cluster- randomised designs 	 reviews quasi-experimental studies observational studies modelling studies qualitative studies
Publication type	 peer-reviewed published research preprints	editorialslettersnews articles

Contact tracing strategies are public health interventions designed to locate contacts of people with an active TB infection (the index case), screen the contacts for TB, then treat or otherwise manage contacts who test positive for latent or active TB. Contacts are typically defined as people with whom the index case has spent time in close proximity, although this varies between contact tracing strategies. Close contacts are generally considered to have had prolonged, frequent, or intense contact with a person with infectious TB ($\underline{4}$).

In this review, countries with a low TB incidence will be defined as any country or territory with an estimated TB incidence rate of less than 40 per 100,000 people, based on World Health Organization 2020 estimates (2). This includes: Albania, American Samoa, Andorra, Anguilla, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Bahamas, Bahrain, Barbados, Belarus, Belgium, Belize, Bermuda, Bosnia and Herzegovina, British Virgin Islands, Bulgaria, Cabo Verde, Canada, Cayman Islands, Chile, Colombia, Comoros, Cook Islands, Costa Rica, Croatia, Cuba, Curacao, Cyprus, Czechia, Denmark, Dominica, Egypt, Estonia, Finland, France, French Polynesia, Germany, Greece, Grenada, Guam, Guatemala, Honduras, Hungary, Iceland, Iran, Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kuwait, Latvia, Lebanon, Lithuania, Luxembourg, Maldives, Malta, Mauritius, Mexico, Monaco, Montenegro, Montserrat, Netherlands, New Caledonia, New Zealand, Niue, North Macedonia, Norway, Occupied Palestinian Territory, Oman, Palau, Panama, Poland, Portugal, Puerto Rico, Qatar, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino, Saudi Arabia, Serbia, Seychelles, Sint Maarten (Dutch part), Slovakia, Slovenia, Spain, Suriname, Sweden, Switzerland, Syrian Arab Republic, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turks and Caicos Islands, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, Vanuatu, and Wallis and Futuna Islands.

Identification of studies

The following databases and trial registries will be searched for studies published up to 27 October 2023: Medline, Embase, Cochrane CENTRAL, Latin American Caribbean Health Sciences Literature (LILACS), CINAHL, Web of Science Core Collection (Science Citation Index Expanded, and Social Sciences Citation Index), Web of Science (Preprints Citation Index), WHO International Clinical Trials Registry Platform, ClinicalTrials.gov, and the Clinical Trials Unit of the International Union Against Tuberculosis and Lung Disease. The 2023 revisions of the sensitivity-maximising version of the Cochrane highly sensitive search filter for identifying randomised controlled trials in Ovid will be used to limit searches in Medline and Embase (<u>5</u>, <u>6</u>).

The search strategy is presented <u>below</u>. The search strategy will be checked by another information specialist. Duplicate references will be removed using Deduklick.

Screening

Screening on title and abstract will be undertaken in duplicate by 2 reviewers for at least 20% of the eligible studies, with the remainder completed by one reviewer. Disagreement will be

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resolved by discussion. Screening on full text will be undertaken by one reviewer and checked by a second.

Data extraction

Summary information for each study will be extracted and reported in tabular form. Information to be extracted will include country, study period, study design, intervention, participants, results, and any relevant contextual data. This will be undertaken by one reviewer and checked by a second.

Risk of bias assessment

Two reviewers will independently complete a risk of bias assessment for included randomisedcontrolled trials using version 2 of the Cochrane risk-of-bias tool ($\underline{7}$), with disagreements resolved by discussion or with a third reviewer.

Synthesis

If data is presented in a consistent format between studies, a narrative synthesis will be produced to describe the results from this review. Alternatively, if data are too heterogeneous, a narrative summary of each study will be provided.

Health inequalities

Variations across populations and subgroups, for example cultural variations or differences between ethnic or social groups will be considered, where evidence is available.

Search strategy

Database: Ovid MEDLINE(R) ALL (1946 to 26 October 2023)

- 1. exp Tuberculosis/ (207096)
- 2. Mycobacterium tuberculosis/ (57830)
- 3. tubercul*.tw,kf. (268923)
- 4. TB.tw,kf. (74629)
- 5. LTBI.tw,kf. (3141)
- 6. or/1-5 (322812)
- 7. Contact Tracing/ (6277)
- 8. (contact* adj5 (trac* or screen* or manag* or investigat* or histor* or detect* or follow* up or list* or find* or notif* or monitor*)).tw,kf. (32302)
- 9. (case* adj5 (trac* or screen* or manag* or investigat* or histor* or detect* or follow* up or list* or find* or notif* or monitor*)).tw,kf. (315508)

- 10. (source* adj5 (trac* or screen* or manag* or investigat* or histor* or detect* or follow* up or list* or find* or notif* or monitor*)).tw,kf. (48340)
- 11. (transmission adj3 dynamic*).tw,kf. (8269)
- 12. referral*.tw,kf. (146310)
- 13. stone in pond.tw,kf. (0)
- 14. (household adj5 screen*).tw,kf. (504)
- 15. social network*.tw,kf. (26543)
- 16. (index patient* or index case*).tw,kf. (12951)
- 17. (chain* adj2 infection*).tw,kf. (538)
- 18. or/7-17 (577044)
- 19. 6 and 18 (15408)
- 20. exp randomized controlled trial/ (602879)
- 21. controlled clinical trial.pt. (95424)
- 22. randomi#ed.ab. (742058)
- 23. placebo.ab. (242489)
- 24. drug therapy.fs. (2630761)
- 25. randomly.ab. (419289)
- 26. trial.ab. (669317)
- 27. groups.ab. (2586347)
- 28. or/20-27 (5804223)
- 29. 19 and 28 (4798)

Database: Embase (1974 to 26 October 2023)

- 1. exp tuberculosis/ (224245)
- 2. Mycobacterium tuberculosis/ (75391)
- 3. tubercul*.tw,kf. (243118)
- 4. TB.tw,kf. (92040)
- 5. LTBI.tw,kf. (4491)
- 6. or/1-5 (327174)
- 7. contact examination/ (8645)
- 8. (contact* adj5 (trac* or screen* or manag* or investigat* or histor* or detect* or follow* up or list* or find* or notif* or monitor*)).tw,kf. (41251)
- 9. (case* adj5 (trac* or screen* or manag* or investigat* or histor* or detect* or follow* up or list* or find* or notif* or monitor*)).tw,kf. (463741)
- 10. (source* adj5 (trac* or screen* or manag* or investigat* or histor* or detect* or follow* up or list* or find* or notif* or monitor*)).tw,kf. (60759)
- 11. (transmission adj3 dynamic*).tw,kf. (9309)
- 12. referral*.tw,kf. (241756)
- 13. stone in pond.tw,kf. (1)
- 14. (household adj5 screen*).tw,kf. (643)
- 15. social network*.tw,kf. (30247)
- 16. (index patient* or index case*).tw,kf. (20041)
- 17. (chain* adj2 infection*).tw,kf. (619)

- 18. or/7-17 (845996)
- 19. 6 and 18 (22164)
- 20. exp randomized controlled trial/ (790503)
- 21. Controlled clinical trial/ (471236)
- 22. random\$.ti,ab. (1987165)
- 23. randomization/ (98805)
- 24. intermethod comparison/ (301757)
- 25. placebo.ti,ab. (366904)
- 26. (compare or compared or comparison).ti. (607882)
- 27. ((evaluated or evaluate or evaluating or assessed or assess) and (compare or compared or comparing or comparison)).ab. (2797155)
- 28. (open adj label).ti,ab. (109690)
- 29. ((double or single or doubly or singly) adj (blind or blinded or blindly)).ti,ab. (275061)
- 30. double blind procedure/ (211673)
- 31. parallel group\$1.ti,ab. (32308)
- 32. (crossover or cross over).ti,ab. (125066)
- 33. ((assign\$ or match or matched or allocation) adj5 (alternate or group\$1 or intervention\$1 or patient\$1 or subject\$1 or participant\$1)).ti,ab. (417560)
- 34. (assigned or allocated).ti,ab. (493387)
- 35. (controlled adj7 (study or design or trial)).ti,ab. (453299)
- 36. (volunteer or volunteers).ti,ab. (283435)
- 37. human experiment/ (647576)
- 38. trial.ti. (404559)
- 39. or/20-38 (6364140)
- 40. (random\$ adj sampl\$ adj7 ("cross section\$" or questionnaire\$1 or survey\$ or database\$1)).ti,ab. not (comparative study/ or controlled study/ or randomi?ed controlled.ti,ab. or randomly assigned.ti,ab.) (9635)
- 41. Cross-sectional study/ not (exp randomized controlled trial/ or controlled clinical study/ or controlled study/ or randomi?ed controlled.ti,ab. or control group\$1.ti,ab.) (363793)
- 42. (((case adj control\$) and random\$) not randomi?ed controlled).ti,ab. (21671)
- 43. Systematic review.ti,ab. not (trial or study).ti. (329373)
- 44. (nonrandom\$ not random\$).ti,ab. (19000)
- 45. "random field\$".ti,ab. (2973)
- 46. (random cluster adj3 sampl\$).ti,ab. (1592)
- 47. (review.ab. and review.pt.) not trial.ti. (1138760)
- 48. "we searched".ab. and (review.ti. or review.pt.) (49788)
- 49. "update review".ab. (136)
- 50. (databases adj4 searched).ab. (63226)
- 51. (rat or rats or mouse or mice or swine or porcine or murine or sheep or lambs or pigs or piglets or rabbit or rabbits or cat or cats or dog or dogs or cattle or bovine or monkey or monkeys or trout or marmoset\$1).ti. and animal experiment/ (1225234)
- 52. Animal experiment/ not (human experiment/ or human/) (2573881)
- 53. or/40-52 (4404690)
- 54. 39 not 53 (5599469)

55. 19 and 54 (3122)

CINAHL Complete

Date of search: 27 October 2023

- 1. (MH "Tuberculosis+") (25906)
- 2. (MH "Mycobacterium Tuberculosis") (4403)
- 3. tubercul* (35094)
- 4. TB (24845)
- 5. LTBI (780)
- 6. S1 OR S2 OR S3 OR S4 OR S5 (40571)
- 7. (MH "Contact Tracing") (2640)
- 8. ((contact* OR case* OR source*) N5 (trac* or screen* or manag* or investigat* or histor* or detect* or follow* up or list* OR find* or notif* or monitor*)) (113949)
- 9. (transmission N3 dynamic*) (1098)
- 10. referral* (88260)
- 11. stone in pond (0)
- 12. (household N5 screen*) (265)
- 13. "social network*" (27066)
- 14. "index patient*" or "index case*" (2678)
- 15. (chain* N2 infection*) (230)
- 16. S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 (227483)
- 17. S6 AND S16 (3437)
- 18. (MH "Randomized Controlled Trials+") (140420)
- 19. (MH "Double-Blind Studies") (54557)
- 20. (MH "Single-Blind Studies") (16095)
- 21. (MH "Random Assignment") (81735)
- 22. (MH "Pretest-Posttest Design") (54005)
- 23. (MH "Cluster Sample+") (6350)
- 24. TI (randomised OR randomized) (144647)
- 25. AB (random*) (402791)
- 26. TI (trial) (186022)
- 27. MH ("sample size") AND AB (assigned OR allocated OR control) (4441)
- 28. (MH "Placebos") (14228)
- 29. PT (randomized controlled trial) (154007)
- 30. AB (control W5 group) (146551)
- 31. MH ("crossover design") OR MH ("comparative studies") (487495)
- 32. AB (cluster W3 RCT) (501)
- 33. (MH "animals+") (105215)
- 34. MH ("animal studies") (154620)
- 35. TI ("animal model*") (3653)
- 36. S33 OR S34 OR S35 (250838)
- 37. MH ("human") (2730270)

- 38. S36 NOT S37 (216542)
- 39. S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 (1034116)
- 40. S39 NOT S38 (985919)
- 41. S17 AND S40 (549)

Web of Science Core Collection (Editions Science Citation Index Expanded 1970 to current, Social Science Citation Index 1970 to current)

Date of search: 27 October 2023

- 1. TS=(tubercul*) OR TS=(TB) OR TS=(LTBI) (224300)
- 2. TS=(contact* NEAR/4 (trac* or screen* or manag* or investigat* or histor* or detect* or "follow* up" or list* or find* or notif* or monitor*)) OR TS=(case* NEAR/4 (trac* or screen* or manag* or investigat* or histor* or detect* or "follow* up" or list* or find* or notif* or monitor*)) OR TS=(source* NEAR/4 (trac* or screen* or manag* or investigat* or histor* or detect* or "follow* up" or list* or find* or notif* or detect* or "follow* up" or list* or find* or notif* or detect* or "follow* up" or list* or histor* or detect* or "follow* up" or list* or histor* or detect* or "follow* up" or list* or find* or notif* or monitor*)) OR TS=(source* NEAR/4 (trac* or screen* or manag* or investigat* or histor* or detect* or "follow* up" or list* or find* or notif* or monitor*)) OR TS=((transmission NEAR/2 dynamic*)) OR TS=(referral*) OR TS=("stone in pond") OR TS=((household NEAR/4 screen*)) OR TS=("social network*") OR TS=(("index patient*" or "index case*")) OR TS=((chain* NEAR/1 infection*)) (676133)
- 3. #2 AND #1 (10918)
- 4. TS=(randomised OR randomized OR placebo OR randomly OR trial OR groups) (7078317)
- 5. #4 AND #3 (2500)

Web of Science Core Collection (Editions Preprint Citation Index 1991 to current)

Date of search: 25 October 2023

- 1. TS=(tubercul*) OR TS=(TB) OR TS=(LTBI) (2910)
- 2. TS=(contact* NEAR/4 (trac* or screen* or manag* or investigat* or histor* or detect* or "follow* up" or list* or find* or notif* or monitor*)) OR TS=(case* NEAR/4 (trac* or screen* or manag* or investigat* or histor* or detect* or follow* up or list* or find* or notif* or monitor*)) OR TS=(source* NEAR/4 (trac* or screen* or manag* or investigat* or histor* or detect* or follow* up or list* or find* or notif* or detect* or screen* or manag* or investigat* or histor* or detect* or follow* up or list* or find* or notif* or monitor*)) OR TS=(source* NEAR/4 (trac* or screen* or manag* or investigat* or histor* or detect* or follow* up or list* or find* or notif* or monitor*)) OR TS=((transmission NEAR/2 dynamic*)) OR TS=(referral*) OR TS=("stone in pond") OR TS=((household NEAR/4 screen*)) OR TS=("social network*") OR TS=(("index patient*" or "index case*")) OR TS=((chain* NEAR/1 infection*)) (35508)
- 3. #2 AND #1 (133)
- 4. TS=(randomised OR randomized OR placebo OR randomly OR trial OR groups) (190686)

Cochrane Central Register or Randomised Controlled Trials

Date of search: 27 October 2023

- 1. MeSH descriptor: [Tuberculosis] explode all trees (3324)
- 2. MeSH descriptor: [Mycobacterium tuberculosis] explode all trees (450)
- 3. tubercul* (9376)
- 4. TB (7919)
- 5. LTBI (191)
- 6. MeSH descriptor: [Contact Tracing] explode all trees (132)
- 7. ((contact* OR case* OR source*) NEAR/4 (trac* or screen* or manag* or investigat* or histor* or detect* or follow* or list* OR find* or notif* or monitor*)) (44233)
- 8. (transmission NEAR/2 dynamic*) (94)
- 9. referral* (18377)
- 10. "stone in pond" (1)
- 11. (household NEAR/4 screen*) (91)
- 12. social network* (6102)
- 13. index patient* or index case* (156393)
- 14. (chain* NEAR/1 infection*) (10)
- 15. #1 OR #2 OR #3 OR #4 OR #5 (14271)
- 16. #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 (211633)
- 17. #15 AND #16 (2321)

Filtered to CENTRAL/Trials only: 1845 results

LILACs

Latin American and Caribbean Health Services Literature Date of search: 27 October 2023

(TB OR LTBI OR tubercul*) AND (contact* OR social network* OR transmission dynamic OR index case OR index patient OR referral*) Filtered to controlled clinical trials only: 135 results

WHO International Clinical Trials Registry Platform

WHO International Clinical Trials Registry Platform Date of search: 27 October 2023

(TB OR LTBI OR tubercul*) AND (contact* OR social network* OR transmission dynamic OR index case OR index patient OR referral*).

111 results for 107 trials.

Clinicaltrials.gov

<u>Clinicaltrials.gov</u> Date of search: 27 October 2023

(TB OR LTBI OR tuberculosis) AND (contact OR social network OR transmission dynamic OR index case OR index patient OR referral)

62 results.

The Union: The International Union Against Tuberculosis and Lung Disease

<u>The Union: The International Union Against Tuberculosis and Lung Disease</u> Date of search: 27 October 2023

Browse of website - 0 relevant records identified.

Figure A.1. PRISMA diagram



Text version of Figure A.1. PRISMA diagram.

A PRISMA diagram showing the flow of studies through this review, ultimately including 0 studies.

From identification of studies via databases, n=10,998 records identified:

- Ovid Medline (n=4,798)
- Ovid Embase (n=3,122)
- CINAHL (n=549)
- Web of Science (n=2,529)

From identification of studies via registers, n=2,149 records identified:

- Cochrane CENTRAL (n=1,845)
- LILACS (n=135)
- WHO ICTRP (n=107)
- ClinicalTrials.gov (n=62)

From these, records removed before screening:

- duplicate records removed (n=3,353)
- duplicate records removed manually (n=0)
- records marked as ineligible by automation tools (n=0)
- records removed for other reasons (n=0)

n=9,794 records screened, of which n=9,765 were excluded, leaving n=29 papers sought for retrieval, of which one was not retrieved.

From identification of studies via other methods, n=0 studies were identified from previous reviews and n=0 studies were identified from the website of the International Union Against Tuberculosis and lung disease.

Of the n=28 papers assessed for eligibility, all were excluded:

- wrong intervention (n=2)
- wrong language (n=1)
- wrong population (n=5)
- wrong study type (n=20)

n=0 papers included in the review.

End of text version of Figure A.1.

Annexe B. Excluded full texts

Exclusion reason: wrong intervention (n=2)

Munoz L and others. <u>'QuantiFERON-TB Gold in-tube as a confirmatory test for tuberculin skin</u> <u>test in tuberculosis contact tracing: a noninferiority clinical trial</u>. Clinical Infectious Diseases 2018: volume 66, issue 3, pages 396 to 403

Oxlade O and others. <u>'Effectiveness and cost-effectiveness of a health systems intervention for</u> <u>latent tuberculosis infection management (ACT4): a cluster-randomised trial</u>. The Lancet. Public Health 2021: volume 6, issue 5, pages e272 to e282

Exclusion reason: wrong language (n=1)

Matsumoto K and others. <u>'[Prevention of secondary tuberculosis in the contact tracing]'</u> Kekkaku 2011: volume 86, issue 11, pages 889 to 890

Exclusion reason: wrong population (n=5)

World Health Organization International Clinical Trials Registry Platform. <u>'Community and</u> <u>universal testing for tuberculosis among contacts'</u>. 2020: ISRCTN10003903

Moonan PK and others. <u>'A neighbor-based approach to identify tuberculosis exposure, the</u> <u>Kopanyo study</u>'. Emerging Infectious Diseases 2020: volume 26, issue 5, pages 1,010 to 1,013

National Library of Medicine. <u>'A Randomized Trial of DOTS Versus Enhanced DOTS for</u> <u>Community Control of Tuberculosis</u>'. 2006: NCT00317330

Law WS and others. <u>'Management of latent TB infection in child household contacts aged under</u> <u>5 years'</u>. International Journal of Tuberculosis and Lung Disease 2021: volume 25, issue 2, pages 151 to 153

Reuter A and others. <u>'Household contact management for rifampicin-resistant tuberculosis'</u>. The Lancet Global Health 2022: volume 10, issue 10, page e1387

Exclusion reason: wrong study type (n=20)

Baxter S and others. <u>'Interventions to improve contact tracing for tuberculosis in specific groups</u> and in wider populations: an evidence synthesis'. Health Services and Delivery Research 2017

Borraccino A and others. <u>'Yield of tuberculosis contact investigation in a low-incidence country'</u>. Journal of Infection 2014: volume 68, issue 5, pages 448 to 454

Borrell S and others. 'Factors associated with differences between conventional contact tracing and molecular epidemiology in study of tuberculosis transmission and analysis in the city of Barcelona, Spain'. Journal of Clinical Microbiology 2009: volume 47, issue 1, pages 198 to 204

Dou Y and others. <u>'An investigation of the impact of index case screening on commonly</u> reported epidemiological estimates in tuberculosis household contact study'. medRxiv 2023

Fournier A and others. <u>'Neither genotyping nor contact tracing allow correct understanding of</u> <u>multidrug-resistant tuberculosis transmission</u>'. European Respiratory Journal 2017: volume 50, issue 3, page 9

Fox GJ and others. <u>'Active case finding in contacts of people with tuberculosis'</u>. Cochrane Database of Systematic Reviews 2011, issue 9, page CD008477

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