

2. Detailed diagnostic criteria and stratification

2.1. Diagnostic criteria

Diagnostic term	Definition
Active tuberculosis	Tuberculosis diagnosed based on clinical and/or microbiological criteria.
Latent tuberculosis infection	<p>Contacts with a tuberculin skin test (TST) result of ≥ 10 mm at 48 to 72 hours. Where these data were not available we used the definition applied in the paper. If both TST and interferon gamma release assay (IGRA) results were performed then the TST result was used. If only an IGRA test was performed, then a result was considered positive based on the cutoff defined in the manuscript.</p> <p>Where a 2 step TST was performed, we used the second measurement in our analysis, following the aforementioned definition of LTBI. We did not analyse TST conversion separately.</p> <p>If only Heaf testing was available, Grades 3 and 4 were considered positive unless otherwise specified in the paper.</p>
Microbiologically proven tuberculosis	Patients with tuberculosis that has been confirmed based on positive smear and/or culture.
Prevalent tuberculosis	'Prevalent cases' of TB among the screened contacts were defined as previously undiagnosed cases of TB among contacts that were diagnosed during the baseline contact investigation or within the first 3 months after diagnosis of the index patient. Contacts who had been diagnosed with TB prior to the contact investigation were not considered prevalent cases, because the identification of these cases could not be attributed to the contact investigation.
Incident tuberculosis	Incident cases of TB were separately analyzed by year after exposure to the index patient with incidence in year 1 being from 3 to 12 months after diagnosis of the index case, incidence in year 2 being between 13 months and 24 months, and so on up to the end of 5 years. Incidence data were not reported if annual incidence could not be determined. Incidence at 1 year was calculated excluding the prevalent cases identified during the initial investigation.
Index patient	The patient with tuberculosis that resulted in the initiation of the contact investigation. Where children were identified as 'index patients', then data were included for all screened 'contacts' even if an undiagnosed adult might have been the source case.
Contacts	Contacts were individuals exposed to the index patient while the patient was considered infectious. Contacts were included in the 'at risk' population for analysis if

	they attended the first reported screening procedure and had not already been diagnosed with TB prior to that screening procedure. This 'at risk' population was the denominator for the estimation of prevalence and subsequent incidence.
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2.2. Stratification of contacts and index patients

Stratification	Definition
Stratification of contacts	
By age	Three age strata were used: (a) 5 years or below (b) >5 to <15 years (c) 15 years and above Where the limits of the age range reported in studies were up to one year higher or lower than our pre-defined age range, then data were included in the pre-defined range for analysis. Otherwise, the age-specific data were not extracted.
Proximity of exposure	(a) Household contacts: Contacts living in the same household as the index patient. (b) Close contacts: Contacts described as 'close' in the manuscript, or household contacts (c) Casual contacts: Contacts described as 'casual contacts' in the manuscript.
HIV status of the contact	Contacts with confirmed HIV infection based on serological testing.
Country of origin of the contact (high-income settings only)	(a) Foreign contacts: contacts born in a country other than that where contact investigation was conducted. (b) Local contacts: Contacts born in the country in which the contact investigation was conducted.
Stratification based on index patient characteristics	
HIV status of index patient	Index patients with confirmed HIV infection based on serological testing.
Smear positivity of index patient	Index patient with a sputum smear that was positive for acid-fast bacilli on microscopy.
MDR / XDR tuberculosis positivity of index patient	Index patient with confirmed Multi-drug resistant or extensively drug resistant tuberculosis, according to World Health Organization definitions.[1]
Stratification by study design	
Study design	Studies were stratified according to design as: (a) Cohort or randomized controlled trial, or (b) Cross-sectional study

Stratification by country characteristic	
Income level of country	Studies were stratified by income level of the country in which they were conducted by applying World Bank definitions of high-income or low-middle income countries based on gross national income (GNI) from 2010 or the latest preceding year for which data were available.
World Health Organization region	Studies were stratified by the six World Health Organization region.[2]

References:

1. World Health Organization (2010) Multidrug and extensively drug-resistant TB (M/XDR-TB): 2010 global report on surveillance and response. Geneva: WHO .
2. World Health Organization (2010) Classification of low- and middle-income countries by income level, epidemic level, and geographical UNAIDS, UNICEF and WHO regions. Available from: http://www.who.int/entity/hiv/data/tuapr2011_annex10_web.xls [cited 25/5/2012]