

VDH Guidance to Assist in Determining the Need for Contact Investigation and Prioritizing Public Health Response

In any investigation, high priority contacts should be identified and evaluated before a decision is made to expand the investigation to medium and low risk contacts.

Whenever a new TB case/suspect is identified, action should be taken to determine the need for a contact investigation as well as to prioritize the identification and evaluation of contacts. A decision to expand should always be based on the results of testing of those most at risk for acquiring TB infection before addressing any additional contacts.

1. Use the Case Characteristics column in **Table 1** to locate the diagnostic information that applies to the case/suspect for which an investigation is being considered.
2. Identify and evaluate all high priority contacts using the criteria listed in the High Priority column.
3. Use **Table 2** to determine if a contact should be included in the investigation based on cumulative exposure time if no other high priority risk factor is present.
4. Expand the investigation to medium priority contacts based on an analysis of the results from the initial round of testing, **and** if all high priority contacts have been identified and evaluated. Resources must be available to adequately evaluate and treat any additional lower priority contacts.
5. Use **Table 2** for guidance to estimate whether the amount of cumulative exposure to an infectious case was long enough to warrant investigation and evaluation of the contact. Low priority contacts should not be screened and tested based on a short duration exposure period unless there are extremely unusual circumstances.
6. Consult with TB Control to discuss the need to expand any investigation beyond high priority contacts.
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Table 1

Assignment of Contact Evaluation Priority Based on Case Characteristics			
Case Characteristics	Investigation and Evaluation Priority		
Pulmonary, pleural or laryngeal	High Priority	Medium Priority	Low Priority
<p>Any of the following scenarios:</p> <ul style="list-style-type: none"> • AFB smear positive • Cavitory CXR • Smear neg./culture pos. • ABN CXR consistent with TB/non-cavitory • Rapid test pos. or neg., culture pos. 	<ul style="list-style-type: none"> • All household contacts • Anyone under 5 yrs old • Contacts with Medical Risk Factors: HIV, TNF alpha blockers, ESRD, long-term steroid use, cancer treatments or other immune compromising condition • Contacts exposed during a medical procedure: Bronchoscopy, sputum induction or autopsy • Contacts in a congregate setting (LTC, Detention facility) <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Contacts exceeding environmental exposure limits for high priority contacts (See Table 2) 	<ul style="list-style-type: none"> • Anyone 5-15 yrs old who does not meet one of the high priority criteria <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Contacts exceeding environment exposure limits for medium priority contacts (See Table 2) 	<p>Anyone other than those listed; only considered if expansion is warranted</p>
<p>Any of the following scenarios:</p> <ul style="list-style-type: none"> • Suspected TB with Abn CXR, not consistent with TB • AFB neg., rapid test neg., culture neg. 	<p>None</p>	<ul style="list-style-type: none"> • All household contacts • Anyone under 5 years old • Contacts with Medical Risk Factors: see above <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Contacts exposed during a medical procedure: see above 	<p>Anyone other than those listed; only considered if expansion is warranted</p>
Extra-pulmonary	High Priority	Medium Priority	Low Priority
<ul style="list-style-type: none"> • Non-pulmonary TB with pulmonary disease ruled out 	<p>None</p>	<p>None</p>	<p>None</p>

Source: MMWR 2005;54 (No. RR-15)

Table 2

VDH recommendations for the cumulative time needed during the infectious period to assign the priority of contact based on environmental exposure				
Space size	Example	High Priority	Medium Priority	Low Priority
Very small	Car, small office, 150 sq. ft.	8 or more hours	4 to less than 8 hours	Less than 4 hours
Small/medium	Classroom, meeting room	24 or more hours	12 to less than 24 hours	Less than 12 hours
Medium/large	Cafeteria, small church	50 or more hours	25 to less than 50 hours	Less than 25 hours
Large	Gymnasium, auditorium	100 or more hours	50 to less than 100 hours	Less than 50 hours
<i>The less time exposed → the lower the potential for transmission → the lower the priority for evaluation of the contact</i>				