

**Additional Frequently Asked Questions (FAQ) for Clarification of Recommendations in
the “Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis*
in Health-Care Settings, 2005”**

1) What is an infection-control team?

The infection-control team consists of persons who develop and implement infection-control policies for a health-care setting (including, but not limited to, individuals with expertise in infection control, epidemiology, clinical issues [medical doctor, registered nurse], microbiology, engineering, and administrative matters).

2) An inpatient setting (a hospital) with more than 200 beds and less than six TB patients for the preceding year would be classified as low risk according to the criteria in the guidelines; however, the infection-control team for our setting prefers to continue screening nurses annually. Is that acceptable?

Yes, the infection-control team may determine that a higher risk classification is warranted for a specific setting or for a specific group of health-care workers (HCWs). Low-risk settings are free to select recommendations for medium-risk settings, if desired.

3) Is the model tuberculin skin test (TST) training program used by the National Health and Nutrition Examination Survey (NHANES) described on page 50 of the guidelines required for all settings?

No, CDC guidelines are recommendations, they are not requirements. “The suggested TST training recommendations are not mandatory” (from page 45 of the guidelines).

“The number of training hours, sessions, and TST readings should be determined by the setting’s TB risk assessment” (p. 48). Settings with a low prevalence of TB may not be able to meet NHANES TST training recommendations.

4) What is the positive cut-point baseline TST result for HCWs?

When making decisions for the diagnosis and treatment of latent tuberculosis infection (LTBI), setting-based risk factors (e.g., the prevalence of TB disease) and personal risk factors (e.g., having an immunocompromising condition or known contact with a TB case) should be assessed when choosing the cut point for a positive TST result.

“For HCWs who are at low risk (e.g., those from low incidence settings), a baseline result of ≥ 15 mm of induration (instead of ≥ 10 mm) might possibly be the cut point. When 15 mm is used as the cut point, TST results of 10–14 mm can be considered clinically negative. These HCWs should not have repeat TST, and the referring physician might not recommend treatment for latent tuberculosis infection (LTBI).” (p. 47)

For HCWs who are at medium risk, a baseline TST result of ≥ 10 mm is considered positive. For HCWs who are known contacts to a person with infectious TB disease (i.e., HCWs who are tested during contact investigations), and for HCWs who are infected with HIV, a TST result of ≥ 5 mm is considered positive.

- 5) **How should HCWs in low-risk settings who have positive test results for *M. tuberculosis* infection (positive TST or blood assay for *M. tuberculosis* [BAMT] result) be managed?**

The treating physician, with assistance from the infection-control team, should decide how to manage these HCWs. After a chest radiograph (CXR) is performed to rule out TB disease, the infection-control team may recommend providing an annual symptom screen to HCWs in low-risk settings who have positive test results for *M. tuberculosis* infection and who may or may not have received treatment for LTBI.

- 6) **The guidelines state (p. 10): “HCWs with a baseline positive or newly positive test result for *M. tuberculosis* infection (i.e., TST or BAMT) or documentation of treatment for LTBI or TB disease should receive one CXR result to exclude TB disease (or an interpretable copy within a reasonable time frame, such as 6 months).” What does “or an interpretable copy within a reasonable time frame, such as 6 months” mean?**

Six months is meant as an example. Individual institutions may set their own parameters. A CXR may be necessary sooner than 6 months, depending on the situation. The treating physician should decide if and when CXRs should be performed.

- 7) **If a HCW with a newly positive TST or BAMT result has documentation of a recent (1 month ago) negative CXR result would they need an additional CXR?**

If the HCW has symptoms of TB, a CXR would be recommended. If the HCW is immunocompromised, a CXR might be considered. If not, another CXR is not needed

unless recommended by a physician. Again, the treating physician should decide if and when CXRs should be performed.

8) If a HCW has documentation of a prior positive TST or BAMT result and documentation of a negative CXR result following that, would they need an additional CXR?

If the HCW has symptoms of TB, a CXR would be recommended. If the HCW is immunocompromised, a CXR might be considered. If not, another CXR is not needed unless recommended by a physician.

9) How should the duration of the infectious period for TB patients be estimated?

“For programmatic purposes, for patients with positive AFB sputum smear results, the infectious period can be considered to begin 3 months before the collection date of the first positive AFB sputum smear result or the symptom onset date (whichever is earlier). The end of the infectious period is the date the patient is placed under airborne precautions or the date of collection of the first of consistently negative AFB sputum smear results (whichever is earlier). For patients with negative AFB sputum smear results, the infectious period can begin 1 month before the symptom onset date and end when the patient is placed under airborne precautions” (p. 35).

Please also see Table 2 from CDC’s Guidelines for the Investigation of Contacts of Persons with Infectious Tuberculosis – Recommendations from the National Tuberculosis Controllers Association and CDC, *MMWR* 2005; 54 (p. 7).

<http://www.cdc.gov/mmwr/pdf/rr/rr5415.pdf>. Table 2 is printed at the end of this document.

10) Is CDC recommending that fit testing should be conducted at least annually in accordance with Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1910.134?

The CDC recommendation regarding fit-testing is: “Perform fit-testing during the initial respiratory-protection program training and periodically thereafter in accordance with federal, state, and local regulations [http://www.osha.gov/SLTC/respiratory protection/index.html](http://www.osha.gov/SLTC/respiratory_protection/index.html)” (p. 39). The recommendation is for initial and periodic fit testing; however, employees must be cognizant of federal, state, and local regulations.

11) Is a personal respiratory protection program required for low-risk settings?

“Settings in which patients with suspected or confirmed TB disease are not expected to be encountered do not need ...a respiratory protection program for the prevention of transmission of *M. tuberculosis*” (p. 17). A personal respiratory protection program is required for all HCWs who will use respirators.

12) Students in our nursing school often change work rotations and may work at different hospitals every 3 months. Would you recommend that nursing students be rescreened each time they change hospitals for a new rotation?

No, routine rescreening every 3 months is not necessary. The infection control team should decide on policies for their specific circumstances. If the nurse is transferring

from low-risk to low-risk settings, “after a baseline result for infection with *M. tuberculosis* is established and documented, serial testing for *M. tuberculosis* infection is not necessary” (p. 12).

If the nurse is transferring **from low-risk to a medium-risk setting**, “after a baseline result for infection with *M. tuberculosis* is established and documented, annual TB screening (including a symptom screen and TST or BAMT for persons with previously negative test results) should be performed” (p. 12 & 13).

If the nurse is transferring from **a medium-risk to a low-risk setting**, after a baseline result for infection with *M. tuberculosis* is established and documented, serial testing for *M. tuberculosis* infection is not necessary.

If the nurse is transferring from **medium-risk to medium risk setting**, after a baseline result for infection with *M. tuberculosis* is established and documented, annual TB screening (including a symptom screen and TST or BAMT for persons with previously negative test results) should be performed.

13) Is directly observed therapy (DOT) recommended for treatment of all persons with TB disease and for all persons with LTBI?

DOT is the ATS-recommended standard of practice for treating TB disease. DOT should be used for all doses during the treatment of TB disease, and it also should be considered for treating LTBI, whenever feasible. CDC’s MMWR publication, Guidelines for the

Investigation of Contacts of Persons with Infectious Tuberculosis – Recommendations from the National Tuberculosis Controllers Association and CDC, 2005; 54 (p. 18–19) states: “Although DOT improves completion rates, it is a resource-intensive intervention that might not be feasible for all infected contacts. The following order of priorities is recommended when selecting contacts for DOT (including window-period prophylaxis):

- contacts aged <5 years,
- contacts who are HIV infected or otherwise substantially immunocompromised,
- contacts with a change in their tuberculin (*or* *BAMT*) status from negative to positive, and
- contacts who might not complete treatment because of social or behavior impediments (e.g., alcohol addiction, chronic mental illness, injection-drug use, unstable housing, or unemployment)”

14) Is the guidance for discontinuing AII intended to apply to direct AFB smears or only to concentrated smears?

A patient may be released from AII based on direct AFB smears. Concentrated AFB smears are more sensitive and hence, would be more stringent.

In addition, the text on one of the slides in the Infection Control guidelines slide set has changed.

This is the link to the slide set: <http://www.cdc.gov/tb/pubs/slidesets/InfectionGuidelines/default.htm>.

Previously, the last part of slide #123 said:

3. Known exposure

≥ 5 mm = positive when baseline result is 0 mm; increase of ≥ 10 mm = positive when baseline result is negative or previous follow-up TST result ≥ 0 mm

It now says (changes are in **bold**):

3. Known exposure (**contact investigation**)

≥ 5 mm = positive when baseline result is 0 mm; increase of ≥ 10 mm = positive when baseline **or previous follow-up TST result is >0 mm, but <10 mm**

TABLE 2. Guidelines for estimating the beginning of the period of infectiousness of persons with tuberculosis (TB), by index case characteristic

Characteristic	AFB* sputum smear positive	Cavitary chest radiograph	Recommended minimum beginning of likely period of infectiousness
Yes	No	No	3 months before symptom onset or first positive finding (e.g., abnormal chest radiograph) consistent with TB disease, whichever is longer
Yes	Yes	Yes	3 months before symptom onset or first positive finding consistent with TB disease, whichever is longer
No	No	No	4 weeks before date of suspected diagnosis
No	Yes	Yes	3 months before first positive finding consistent with TB

SOURCE: California Department of Health Services Tuberculosis Control Branch; California Tuberculosis Controllers Association. Contact investigation guidelines. Berkeley, CA; 1998.

*Acid-fast bacilli.