



# Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel

- Key Points
- Screening
- Testing

Sosa LE, Njie GJ, Lobato MN, et al. Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019. *MMWR Morb Mortal Wkly Rep* 2019;68:439–443. DOI: <http://dx.doi.org/10.15585/mmwr.mm6819a3>

Jensen PA, Lambert LA, Iademarco MF, Ridzon R. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care settings, 2005. *MMWR Recomm Rep* 2005;54(No. RR-17).

## Abbreviations

HCP, health care personnel; IGRA, interferon-gamma release assay; LTBI, latent tuberculosis infection; TB, tuberculosis; TNF, tumor necrosis factor; TST, tuberculin skin test

## Source

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## Disclaimer

*This pocket guide attempts to define principles of practice that should produce high-quality patient care. It is applicable to specialists, primary care, and providers at all levels. This pocket guide should not be considered exclusive of other methods of care reasonably directed at obtaining the same results. The ultimate judgment concerning the propriety of any course of conduct must be made by the clinician after consideration of each individual patient situation.*

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## Key Points

- A systematic review found a low percentage of health care personnel (HCP) have a positive tuberculosis (TB) test at baseline and upon serial testing.
- Updated recommendations for screening and testing HCP include:
  - ▶ an individual baseline (preplacement) risk assessment, symptom evaluation and testing of persons without prior TB or latent TB infection (LTBI)
  - ▶ no routine serial testing in the absence of exposure or ongoing transmission
  - ▶ treatment for HCP diagnosed with LTBI
  - ▶ annual symptom screening for persons with untreated LTBI
  - ▶ annual TB education of all HCP.

## Assessment

**Table 1. Indicators of Risk<sup>a</sup> for TB at Baseline HCP Assessment<sup>b</sup>**

**HCP should be considered to be at increased risk for TB if they answer "yes" to any of the following statements.**

1. Temporary or permanent residence (for  $\geq 1$  month) in a country with a high TB rate (i.e., any country other than Australia, Canada, New Zealand, the United States, and those in western or northern Europe)

OR

2. Current or planned immunosuppression, including human immunodeficiency virus infection, receipt of an organ transplant, treatment with a TNF-alpha antagonist (e.g., infliximab, etanercept, or other), chronic steroids (equivalent of prednisone  $\geq 15$  mg/day for  $\geq 1$  month), or other immunosuppressive medication

OR

3. Close contact with someone who has had infectious TB disease since the last TB test

<sup>a</sup> Individual risk assessment information can be useful in interpreting TB test results. (Lewinsohn DM, Leonard MK, LoBue PA, et al. Official American Thoracic Society/Infectious Diseases Society of America/Centers for Disease Control and Prevention clinical practice guidelines: diagnosis of tuberculosis in adults and children. *Clin Infect Dis* 2017;64:111–5).  
<https://academic.oup.com/cid/article/64/2/111/2811357>external icon

<sup>b</sup> Adapted from a tuberculosis risk assessment form developed by the California Department of Public Health. <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/TBCB-CA-TB-Risk-Assessment-and-Fact-Sheet.pdf>.

## Screening

**Table 2. Comparison of 2005<sup>a</sup> and 2019<sup>b</sup> Recommendations for TB Screening and Testing of U.S. HCP**

| Category   | 2005 Recommendation  | 2019 Recommendation  |
|--|--|--|
| <b>Baseline (pre-placement) screening and testing</b>    | TB screening of all HCP, including a symptom evaluation and test (interferon-gamma release assay [IGRA] or tuberculin skin test [TST]) for those without documented prior TB disease or LTBI.  | TB screening of all HCP, including a symptom evaluation and test (IGRA or TST) for those without documented prior TB disease or LTBI (unchanged); individual TB risk assessment (new).   |
| <b>Postexposure screening and testing</b>                | Symptom evaluation for all HCP when an exposure is recognized. For HCP with a baseline negative TB test and no prior TB disease or LTBI, perform a test (IGRA or TST) when the exposure is identified. If that test is negative, do another test 8–10 weeks after the last exposure. | Symptom evaluation for all HCP when an exposure is recognized. For HCP with a baseline negative TB test and no prior TB disease or LTBI, perform a test (IGRA or TST) when the exposure is identified. If that test is negative, do another test 8–10 weeks after the last exposure (unchanged). |
| <b>Serial screening and testing for HCP without LTBI</b> | According to health care facility and setting risk assessment. Not recommended for HCP working in low-risk health care settings. Recommended for HCP working in medium-risk health care settings and settings with potential ongoing transmission.                                   | Not routinely recommended (new); can consider for selected HCP groups (unchanged); recommend annual TB education for all HCP (unchanged), including information about TB exposure risks for all HCP (new emphasis).  |
| <b>Evaluation and treatment of positive test results</b> | Referral to determine whether LTBI treatment is indicated.   | Treatment is strongly encouraged for all HCP with untreated LTBI, unless medically contraindicated (new).  |

<sup>a</sup> Jensen PA, Lambert LA, Iademarco ME, Ridzon R. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care settings, 2005. *MMWR Recomm Rep* 2005;54(No. RR-17). <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm>.

<sup>b</sup> All other aspects of the Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care settings, 2005 remain in effect, including facility risk assessments to help guide infection control policies and procedures.