

CURRENT TOPICS

Updated Tuberculosis Screening Guidelines for Health Care Personnel

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Abstract: Updated Centers for Disease Control and Prevention (CDC) guidelines for tuberculosis (TB) screening of U.S. health care personnel may change practice.

Keywords: tuberculosis screening, health care personnel

The Centers for Disease Control and Prevention (CDC, 2019) and the National TB Controllers Association released updated tuberculosis (TB) screening guidelines for health care personnel (HCPs) in the United States. Health care personnel are workers (paid and unpaid) in health care settings with the potential to share air space with individuals having TB (Jensen et al., 2005). Health care settings include inpatient and outpatient settings, laboratories, emergency medical services, medical settings in correctional facilities, home-based health care and outreach settings, long-term care facilities, and clinics in homeless shelters. Tuberculosis screening is individualized risk assessment, symptom review, and testing for *Mycobacterium tuberculosis* with Interferon Gamma Release Assay (IGRA) blood test or intradermal tuberculosis skin test (TST). Significant from earlier TB screening guidelines for health care settings is that annual TB screening of HCPs is not recommended except with known exposure or ongoing transmission at the worker's health care facility (CDC, 2019).

Screening guidelines were updated after a systematic review of evidence revealed that from 1991 to 2017, annual U.S. TB rates declined 73%, dropping to 2.8 per 100,000; HCP rates showed similar trends (Sosa et al., 2019). Updated guidelines show U.S. HCPs should have TB screening done post offer/preplacement, after changing jobs to different settings, and after known exposures without documented latent tuberculosis infection (LTBI) or active TB (CDC, 2019). Preplacement testing establishes a comparison baseline should a potential exposure occur, detects and promotes treatment of latent or active TB, and decreases risk of spreading TB. The CDC recommends HCPs working in the United States not undergo

routine TB screening at any interval after baseline unless at higher risk from temporary or permanent residence in a country with high TB rates, close contact with someone with infectious TB disease, or immunosuppression.

Post-exposure screening procedures are unchanged and include risk assessment, symptom review, and testing by TST or IGRA using the same test from baseline for consistency. Individuals must be re-tested 8 to 10 weeks after exposure if initial TST or IGRA testing is negative (CDC, 2019). Clinicians should repeat positive IGRA tests, but positive TST in a low risk non-symptomatic individual may be confirmed with IGRA. If both tests are positive, the HCPs should be referred for further workup and TB treatment (Sosa et al., 2019). Workers positive at baseline or post-exposure screening must be assessed for active TB disease symptoms: cough lasting over 3 weeks, unexplained weight loss, night sweats or fever, and loss of appetite (CDC, 2019). Confirmed or suspected cases of TB must be reported to local or state health departments and referred for treatment. Any HCP with a positive TB test without active TB is diagnosed with LTBI and should be strongly encouraged to accept proper prophylactic treatment to reduce risk of active TB disease. Annual symptom screening is required for HCPs with untreated LTBI (CDC, 2019).

All HCPs must complete annual TB training that reviews exposure risks, signs and symptoms of TB disease, and infection control policies and procedures. Educational materials are available from the CDC (2018). Health care facilities may complete serial TB testing of high-risk worker populations (e.g., pulmonologists or respiratory therapists) or in areas of ongoing transmission; cooperation with the state and local health departments is encouraged when making these decisions (CDC, 2019). Occupational health nurses play a key role in managing TB screening programs for HCPs. Understanding these evidence-based recommendations will allow occupational health nurses to positively influence change within their organizations, reduce medical costs, and protect the health and safety of workers and the public.

Conflict of Interest

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References

- Centers for Disease Control and Prevention. (2018). *Tuberculosis (TB)*. <https://www.cdc.gov/tb/>
- Centers for Disease Control and Prevention. (2019). *TB screening and testing of health care personnel*. <https://www.cdc.gov/tb/topic/testing/healthcareworkers.htm>
- Jensen, P. A., Lambert, L. A., Iademarco, M., & Ridzon, R. (2005). *Guidelines for preventing the transmission of Mycobacterium tuberculosis in health-care settings, 2005* (Morbidity and Mortality Weekly Report, 54, RR-17). <https://www.cdc.gov/mmwr/pdf/rr/rr5417.pdf>
- Sosa, L. E., Njie, G. J., Lobato, M. N., Morris, S. B., Buchta, W., Casey, M. L., . . . Belknap, R. (2019). Tuberculosis screening, testing, and treatment of U.S. health care personnel: Recommendations from the National Tuberculosis Controllers Association and CDC. *Morbidity and Mortality Weekly Report*, 68, 439–443. <https://www.cdc.gov/mmwr/volumes/68/wr/mm6819a3.htm>

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