



Building a Healthy Boston

# PUBLIC HEALTH ADVISORY

## Recommendations for Tuberculosis Screening Among Health Care Personnel in the City of Boston

*September 6, 2019*

The Boston Public Health Commission (BPHC) is responding to the [updated National Tuberculosis \(TB\) Controllers Association/Centers for Disease Control and Prevention \(CDC\) guidelines for TB screening, testing, and treatment of health care personnel in the United States](#). The purpose of this Public Health Advisory is to make specific recommendations for health care personnel (HCP) serving the Boston area.

In the early 1990s, the United States experienced a resurgence of TB associated with several factors, including HIV infection, homelessness and transmission of the disease within healthcare facilities. This resulted in CDC recommendations that included annual screening of HCP for TB infection in order to detect unrecognized transmission of TB. Since that time, improved TB control (and control of HIV infection) has led to a decreased incidence of TB and risk for its transmission within healthcare facilities. Because of this, the yield of annual testing for detecting unidentified cases has become very low and it is likely that “conversions” may often represent false positives.

### RECOMMENDATIONS

1. There is no change to CDC recommendations for pre-placement or post exposure contact screening/assessment.
  - a. All HCP (including full-time, part-time and per diem workers, visiting or part-time students, etc.) should have baseline TB risk assessment and infection status documented upon hire, with a test for TB infection, either a tuberculin skin test (TST) or an interferon-gamma release assay (IGRA) or documentation of a previous positive or negative test for TB infection in the absence of exposure risk. Baseline risk assessment and testing results may be made available to the HCP for future use.
    - The “two step” TST is done for those individuals who have not had a skin test in many years and may be “true positive” but have had a waning response that is stimulated by a second test.
  - b. HCP who have ongoing risk for or from TB infection should be referred for testing, as indicated by epidemiology or increased risk for active disease (immunocompromise, treatment with immune modifying biologics).

(ADVISORY CONTINUES ON NEXT PAGE)

2. Routine serial testing to assess ongoing risk for transmission is no longer recommended.
  - a. Health care facilities may consider ongoing, periodic TB infection screening in some HCP and for some units at potentially higher risk for TB exposure for quality assurance purposes.
3. Once baseline TB infection status is established:
  - a. HCP should receive annual education about TB, its signs and symptoms, and an explanation of what might put them at risk for exposure.
  - b. HCP who have had risk for TB exposure outside of the workplace should be tested for TB infection. You may not be permitted to ask them about travel or medical conditions that might put them at risk but making them aware of these risks and asking if any apply may be permitted.
  - c. HCP who do not have TB infection and no identified outside risk for exposure should only be re-tested as part of a contact investigation related to workplace exposure.
  - d. HCP who have documented untreated TB infection should be counseled about the signs and symptoms of active tuberculosis and screened for these signs and symptoms yearly associated with annual TB education.
    - Newly identified TB infection should result in a clinical evaluation for active TB and a chest x-ray.
    - All HCP (and others) with TB infection should be offered treatment for latent TB infection and encouraged to complete it.

Latent TB infection may be detected by either TST (using purified protein derivative (PPD) and the Mantoux technique) or use of one of two FDA-approved interferon-gamma release assay (IGRA) blood tests, QuantiFERON-TB or T-SPOT.

CDC is expecting a 3-10-month nationwide shortage of APLISOL<sup>®</sup>, one of two purified-protein derivative (PPD) tuberculin antigens that are licensed by FDA for use in performing tuberculin skin tests (TST). In the meantime, substitute an IGRA blood test for the TST or substitute the alternative PPD product, TUBERSOL<sup>®</sup>, for APLISOL<sup>®</sup> for skin testing. Prioritize skin testing to focus testing on persons at risk for TB infection and/or progression to disease and defer routine skin testing of persons in settings with low risk for exposure until APLISOL<sup>®</sup> availability is restored.

As a reminder, cases of tuberculosis (disease or latent infection) should be reported directly to Massachusetts Department of Public Health. Click [here](#) for MDPH TB reporting forms, and click [here](#) for information on reporting other infectious diseases in Boston. For questions, contact the Infectious Disease Bureau, Communicable Disease Control Division, Boston Public Health Commission at (617) 534-5611.

(ADVISORY CONTINUES ON NEXT PAGE)

## RESOURCES

[TB in Boston Reports \(2011-2018\)](#)

[Tuberculosis Fact Sheets \(available in multiple languages\)](#)

## REFERENCES

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 May 17;68(19):439-443.

[https://www.cdc.gov/mmwr/volumes/68/wr/mm6819a3.htm?s\\_cid=mm6819a3\\_w](https://www.cdc.gov/mmwr/volumes/68/wr/mm6819a3.htm?s_cid=mm6819a3_w).

Nationwide Shortage of Tuberculin Skin Test Antigens: CDC Recommendations for Patient Care and Public Health Practice. Distributed via the CDC Health Alert Network; June 6, 2019. Accessible at:

<https://emergency.cdc.gov/han/han00420.asp>.

Screening for Latent Tuberculosis Infection in Adults US Preventive Services Task Force

Recommendation Statement. JAMA. 2016;316(9):962-969. doi:10.1001/jama.2016.11046 Accessible at:

<https://jamanetwork.com/journals/jama/fullarticle/2547762>.

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