



MARYLAND Department of Health

Recommendations Regarding the National Shortage of Purified Protein Derivative (PPD) Solution

These recommendations will remain in effect until the national shortage of PPD solution has abated.

Alternatives to ®Aplisol:

- Tubersol may be used for TB skin testing (TST) in lieu of Aplisol and is placed, read and interpreted the same way. CDC, in evaluating studies of both products, has determined that either is acceptable to use for screening purposes. It is recommended the same product be used consistently (i.e., do not switch products in the middle of a 2-step TST). The Heartland TB Regional Training and Medical Consultation Center has compiled a summary of the research and frequently asked questions (FAQs) regarding the two different PPD solutions http://www.heartlandntbc.org/qoi/qoi_aplisol_and_tubersol.pdf.

Available alternatives to either Tubersol® or Aplisol®:

- Two Interferon gamma release assays (IGRA) are available for use in the United States; QuantiFERON –TB Gold InTube (QFT)® (Cellestis Quiagen) and T-Spot.TB® (Oxford Immunotec). Both IGRA tests are considered acceptable to use in place of either PPD product. The IGRA is a laboratory test and users need to interpret test results based on instructions from the manufacturer. Improper handling of the blood tubes for both IGRA products can affect the results reported, so staff should be fully trained before using.
 - IGRAs are more expensive than PPD solution but do not require repeat clinic visits by patients. Medicaid does cover the cost of IGRA testing for many eligible patients. Some private insurers will cover IGRA testing, but not all. Providers should check with the insurer.
 - A limited number of local health departments in Maryland are using IGRA tests, but the use is restricted. Private providers should not refer individuals to the local health departments for IGRA testing without checking with the local TB program first.

Highest Priority for Testing:

- Persons suspected of having active TB disease.
- High-risk contacts to confirmed TB cases.
- Persons at high risk of developing active TB if infected (i.e., newly HIV infected individuals and children ≤ 4 years of age).
- Refugees and immigrants who have a B-waiver classification

Employee Screening (hospitals, community based health centers, nursing homes and other congregate settings):

- **Current employees and volunteers** should **not** receive serial TB testing in the absence of exposure or ongoing transmission. Please refer to the Center for Disease Control’s June 6, 2019 Morbidity and Mortality Weekly Report for updated guidance for tuberculosis testing and screening for health care personnel. Please note that certain groups who might be at increased occupational risk for TB exposure may still warrant serial testing.
- **New employees and volunteers** should continue to have either 2-step TST or an IGRA done as part of the pre-employment process if possible. A new employee who has documentation of a recent negative TST or negative IGRA test within the previous 12 months, has no signs or symptoms of TB, and is not found to be at high risk for TB using the Individual TB Risk Assessment in the box below, may have initial testing deferred. A review of the Individual TB Risk Assessment and the TB signs/symptoms checklist should be documented in the employee’s record with a copy of the approved documentation indicating prior testing results.

Indicators of Risk for Tuberculosis at Baseline Health Care Personnel Assessment

Health care personnel 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 ≥ 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 ≥ 15 mg/day for ≥ 1 month), or other immunosuppressive medication
Or
3. Close contact with someone who has had infectious TB disease since the last TB test

Testing for School Entry (policies vary by county/jurisdiction)

- TB sign and symptom checklist
- **If there is a history** of a previous positive test result or any current symptoms, the student should contact their local health department or primary care provider to be ruled out for active tuberculosis
- **If there is no history** of a previous positive test result or any current symptoms, they should be placed on a wait list to get a skin test or have an IGRA placed.

Refugee and Immigrant Health Screening:

- IGRA testing is preferred for foreign-born individuals who have been vaccinated previously with BCG.
- Migrant workers without access to insurance should be screened for signs and symptoms of TB on hire. Employers of large numbers of migrant workers (i.e., poultry processing plants, large scale nursery operations) should consult with their local health department regarding annual and/or new hire TB testing requirements. IGRA tests are an option.

Correctional Facilities:

- Detention centers, local jails and prisons should discuss annual and serial testing of employees and inmates with appropriate administrations and oversight agencies. The feasibility of deferring annual screening for a period of time on current employees should be

discussed based on the risk assessment presented by the particular facility. Providing IGRA testing for employees in extremely high risk facilities is also an option. Maryland has reported 0-6 TB cases per year for all correctional facilities in the state over the past 10 years, accounting for $\leq 3\%$ or less of the total number of annual cases reported.

- Recommendations developed and issued by the National Tuberculosis Coordinators Association/ National Tuberculosis Nurse Coalition Corrections Workgroup are summarized in the table below and may be shared with local correctional institutions.

Recommendations for Responding to Tuberculin Shortages

- Prioritize TSTs for screening inmates at intake:
 - As part of an evaluation of persons with symptoms suggestive of TB disease,
 - Persons infected with HIV,
 - Contacts to a person with pulmonary or laryngeal TB,
 - Persons arrived from high TB incidence countries within the past year,
 - And, prior to transfer to another facility (those who are due for an annual TST)
 - Consider deferring annual screening of employees—other than priority candidates listed above—unless sufficient tuberculin is available.
 - Consider alternative screening tests such as an Interferon Gamma Release Assay (IGRA)—blood tests for TB infection (T-SPOT.*TB* and QuantiFERON®—GIT) or chest X-ray.
- National Tuberculosis Coordinators Association/ National Tuberculosis Nurse Coalition Corrections Workgroup_01/24/2013**

References:

- **CDC Health Alert Network (HAN): *Nationwide Shortage of Tuberculin Skin Test Antigens:***
CDC Recommendations for Patient Care and Public Health Practice,
<https://emergency.cdc.gov/han/HAN00420.asp>
- For further information about the updated guidance for tuberculosis screening and testing in health care personnel see the Center for Disease Control and Prevention’s, **Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019. MMWR 2019; 68(19):439–443,** <http://dx.doi.org/10.15585/mmwr.mm6819>
- For further information about tuberculosis prevention in health care settings outside of the 2019 updates, see the Centers for Disease Control and Prevention’s, **Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005. MMWR 2005; 54(No. RR-17),** <http://www.cdc.gov/mmwr/pdf/rr/rr5417.pdf>
- For general questions please contact the following:
 - Local health department TB Control Coordinator
 - Maryland Department of Health Center for TB Control and Prevention (410-767-6698)
 - Maryland Department of Health Nurse Infection Prevention and Control (410-767-3188)