

Title: TUBERCULOSIS CONTROL PROGRAM	Policy Number: EP 7.7
Regulation Joint Commission Infection Prevention Standard IC.02.03.01. Reference: CDC. Texas Department of Public Health.	Effective Date: 07/2019

Policy Statement:

Texas Tech University Health Sciences Center El Paso (TTUHSC El Paso) requires baseline tuberculosis skin testing (TST) and an individual Tuberculosis (TB) Assessment for all occupational groups that meet the definitions of Risk Category 1 and/or 2 as defined in this policy. The purpose of this policy is to maintain a safe environment for both patients and health care workers by reducing the risk of tuberculosis transmission based on current U. S. Department of Health and Human Services and Centers for Disease Control and Prevention (CDC) Recommendations. Compliance with this policy is mandatory.

Additional requirements may apply based on HSC OP 75.11 Health Surveillance Program for TTUHSC Institutional Health and Infection Control program. (Refer to this policy for more information)

Scope and Distribution:

This policy applies throughout TTUHSC El Paso Campus including Paul L. Foster School of Medicine, Gayle Greve Hunt School of Nursing, Graduate School of Biomedical Sciences, and off - site centers and clinics.

Definitions:

Risk category 1 - applies to individuals performing activities with the highest risk of transmission of tuberculosis (TB). This includes staff/students who have direct contact with a possible/potential infectious individual, have face-to-face contact with an individual capable of spreading the infection, or staff/students working with research participants or animals who may pose a risk of transmission of tuberculosis. (For example: clinical personnel having patient to patient contact, patient to health care worker (HCW), HCW to patient, and HCW to HCW)

Risk category 2 - applies to individuals performing activities with a probable risk of transmission of TB as a result of the geographic location of their work on the clinical unit or in the laboratory. (For example: Medical records personnel, registration personnel, facilities personnel, greeters, and ancillary staff in clinic settings)

Risk category 3 - applies to individuals performing activities with a possible risk of transmission of TB. These activities usually involve staff who may have indirect contact with the source of the infectious agent through airborne transmission, through the use of vehicles, accidental face-to-face contact such as the cafeteria, or an academic or administrative office.

Risk category 4 - applies to individuals performing activities with minimal risk of transmission of TB. These staff work off-site, do not travel to any site with potential source of infection and do not require face to face contact with high risk people (For example: MPIP staff)

Health Care Worker or HCW - Meaning all paid and unpaid health care personnel who have the potential for exposure to patients and / or infectious material.

Mantoux tuberculin skin test (TST) or TB test - A test that is often used to find out if you are infected with TB bacteria. A TB skin test requires two visits with a health care provider, one visit for placement and a



second visit for test reading. TST is performed by injecting a small amount of fluid (called tuberculin) into the skin on the lower part of the arm.

TB disease - an illness in which TB bacteria are multiplying and attacking a part of the body, usually the lungs The symptoms of TB disease include weakness, weight loss, fever, no appetite, chills, and sweating at night. Other symptoms of TB disease depend on where in the body the bacteria are growing. If TB disease is in the lungs (pulmonary TB), the symptoms may include a bad cough, pain in the chest, or coughing up blood. A person with TB disease may be infectious and spread TB bacteria to others.

Latent TB infection (LTBI) - a condition in which TB bacteria are alive, but inactive in the body. People with latent TB infection have no symptoms, don't feel sick, can't spread TB to others, and usually have a positive TB skin test or positive TB blood test reaction. Treatment for latent TB infection should be considered to prevent TB disease.

Symptomatic- HCW experiencing one or more symptoms of active tuberculosis:

- Coughing up blood (Hemoptysis)
- Fever/chills
- Night sweats
- Persistent fatigue/ loss of appetite
- Frequent persistence cough
- Unexplained weight loss

Asymptomatic - HCW experiencing none of the symptoms of active tuberculosis listed above

Exposure - an event where infectious material/aerosol comes in contact with eyes, mouth, mucous membranes, or non-intact skin, during performance of assigned duties either as an employee or student.

Note:

Only TST trained administers may administer and read TST's. TST administers are not permitted to read their own TST.

TST readings must be done 48 – 72 hours after test placement, results must be documented in millimeters (mm) of induration.

Newly hired, eligible TTUHSC El Paso employees/students must complete the TB screening process prior to their start of employment/rotation date or within ten calendar days of employment/school.

Procedure:

1. <u>Baseline screening</u>: all HCW from risk factors categories 1 & 2 and students without documentation of prior TB disease or LTBI will undergo a TST, an individual TB risk assessment (Attachment B, Table 1) and symptom evaluation.



- a. Interpretation of TST results is weighed by the likelihood of infection, the likelihood of progression to tuberculosis if infected and the benefit of therapy, as in Attachment B, Figure 1 and Figure 2.
- b. Individuals that receive a TST with a positive result, are asymptomatic and are at low risk for progression on the basis of their risk assessment will have a confirmatory test following this initial Positive result. For individuals with a positive TST and symptoms and/or not at low risk, no confirmatory test will be required.
- c. If TST is refused, a Quantiferon Gold (QFT) test must be obtain (following Note 3 above) at the person's own expense. The Office of Occupational Health will **NOT CLEAR** HCW/student to begin care/work/rotations until requirements are completed.

If QFT is negative, consider the HCW/student negative.

If QFT is positive, follow steps from procedure 1. a and b.

If the QFT is refused, the person must explore possible options with their department/Student Affairs and/or the Infection Control Committee Chair.

- 2. **Baseline screening:** all HCW from risk factors categories 1 & 2 or/and students with documentation of prior TB disease or LTBI will not undergo a TST. They will be screened with symptom evaluation and a chest x-ray. Asymptomatic individuals and documentation of a normal chest x-ray at or after the diagnosis of LTBI will not require a new x-ray. Those with previously untreated LTBI will be encouraged to receive treatment. An x-ray may be required before this treatment starts.
- 3. Evaluation and treatment of health care personnel with newly positive test: These individuals will undergo a symptom evaluation and a chest X-ray to assess for TB disease. The City of El Paso Department of Public Health TB Chest Clinic will be immediately notified if TB disease is suspected. Once TB disease is excluded, they will be considered to have LTBI. Treatment will be encouraged for all HCW and students with untreated LTBI.
- 4. **Serial screening and testing:** Individuals without LTBI at baseline screening, serial screening will not routinely be performed unless at any point it is recommended by the Infection Control Committee for selected HCW groups. TB exposure risk education for all HCW from risk factor categories 1 & 2 will be conducted annually.
 - a. Individuals diagnosed with LTBI prior to or at baseline screening that do not complete LTBI treatment will be monitored with annual symptom evaluations.
 - b. These HCW will be educated about the signs and symptoms of TB disease that will prompt an immediate evaluation between screenings.
- 5. **Post exposure screening and testing:** will consist of symptom evaluation for all individuals when an exposure is recognized. For individuals with a baseline negative TB test and no prior TB disease or LTBI, a TST will be performed when the exposure is identified. If the test is negative, another test 8-10 weeks after the last exposure will be done. If the first or second test is positive, the process described under #3 will be followed.
 - a. HCW with documented prior LTBI or TB disease do not need another test for infection after exposure but will be evaluated by symptoms, and x-ray when needed.



- b. Further evaluation should occur if a concern for TB disease exits.
- 6. Employees/students referred to the City of El Paso Department of Public Health's TB Chest Clinic for LTBI or suspicion of TB disease will have: 1. Initial chest radiographs (including interpretation), 2. Clinical evaluation, 3. Counseling and 4. treatment as deemed necessary by the TB Chest Clinic.
 - a. TTUHSC El Paso will pay TB Chest Clinic charges if employee has converted during direct patient care at TTUHSC El Paso Ambulatory clinic.
 - i. The home department of the employee pays TB Chest Clinic fees.

7. Work Restrictions for:

- a. Active Pulmonary or Laryngeal TB:
 - i. HCW/student will be excluded from work/rotations until considered no longer infectious by treating physician.
 - ii. Before returning to work/school, the HCW/student must provide evidence of adequate clearance deemed appropriate by the Occupational Health Office.
 - iii. HCWs/students who discontinue treatment before the recommended course of therapy will be excluded from work/rotations until treatment is resumed, and an adequate response to therapy is documented.

b. Latent TB (LTBI):

- i. HCW/students with LTBI who cannot complete or do not take the full course of preventive regimen, do not need to be excluded from work/rotations, however, they will be counseled about the risk of developing active TB. They will be instructed to seek evaluation promptly if symptoms develop.
- c. Tuberculosis Chest Clinic Referral Acknowledgement Form will be signed by the employee/student referred to the TB Chest Clinic. The Office of Occupational Health will maintain documentation of every referral on HCW/student file.

8. Responsibility:

- a. All HCWs/students whose responsibility could be affected by this policy are expected to be familiar with this program. Failure/refusal to comply with this policy will be subjected to appropriate performance management. (See below)
 - i. Faculty The Chair of the department.
 - ii. Resident Program Director of the respective training program.
 - iii. Staff The Administrator of the department.
 - iv. Student The Associate Dean of Student Affairs.

9. Enforcement:

- a. HCWs/students non-compliant with this policy represent a health care risk to their co-workers/students and to our patients/visitors and must not work in a clinical setting. The Office of Occupational Health manages a notification process, utilizing TTUHSC eraider, e-mails, to notify individuals, and as required, their supervisors or clinical leaders, if an individual has not completed required baseline TST process.
 - i. After the tenth calendar day from starting activity, exposure reporting or due date of testing, notices will contain language which indicates that the employee must not work in a TTUHSC EI Paso clinical facility until further notice.
 - ii. The Office of Clinical Affairs shall notify the Office of Clinical Information Systems to disable the employee's eraider access to the Electronic Medical Record or Business program until the individual completes the required testing.
 - In addition, the Office of Clinical Affairs will notify the Medical Staff Office(s) of pertinent hospital(s) that non-complaint individual should not be allowed to provide services on behalf of TTUHSC EI Paso until requirements are completed.
 - iii. The department manager/supervisor/chair may consider formal disciplinary action against the employee/student.

References:

Center for Disease Control and Prevention. Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Settings, 2005. MMWR Dec. 30, 05, Vol 54 (No. – RR17)

Center for Disease Control and Prevention. Guideline for infection control in health care personnel, 1998.

Joint Commission Infection Prevention Standard. Comprehensive Accreditation Manual, 2016. IC.02.03.01.

The City of EL Paso, T. (2019). Tuberculosis is a reportable condition. EL Paso: Department of Public Health.

Sosa LE, N. G. (2019). *Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel:* Recommendations from the National Tuberculosis Controllers Association and CDC. Atlanta: MMWR Morb Mortal Wkly Rep 2019. Retrieved from http://dx.doi.org/10.15585/mmwr.mm6819a3

David M. Lewinsohn, Michael K. Leonard, Philip A. LoBue, David L. Cohn, Charles L. Daley, Ed Desmond, Joseph Keane, Deborah A. Lewinsohn, Ann M. Loeffler, Gerald H. Mazurek, Richard J. O'Brian, Madhukar Pai, Luca Richeldi, Max Salfinger, Thomas M. Shinnic. 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. 03 01 2017. Article. 07 2019. https://academic.oup.com/cid/article/64/2/111/2811357.



Policy Number:	7.7	Original Approval Date:	10/2005
Version Number:	10	Revision Date:	07/2019
Signatory approval on file by:	Juan Figueroa, M.D. Director of Clinical Operations Clinic Operations Committee, Chair Paul L. Foster School of Medicine		
	Armando Meza, MD Infection Control Committee C	Chair	

Texas Tech University Health Sciences Center at El Paso