

UNIVERSITY POLICY

Policy Name:	Tuberculosis Surveillance				
Section #:	100.3.2	Section Title:	Clinical, Compliance, Ethics & <u>Corporate Integrity</u> : Clinical Health, Safety & Patient Care	Formerly Book:	00-01-40-42:00; 40.3.3
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Responsible Executives:	Executive Vice President, for Health Affairs & RBHS Chancellor and Vice President for Health Affairs	Revised:	07/01/2010; 07/01/2013; 06/12/2020; <u>09/21/2020</u>		
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1. Policy Statement

The policy covers Rutgers University employees who are Healthcare Personnel and Public Safety Personnel, as defined in [University Policy 100.3.1: Influenza Immunization Policy for Covered Individuals](#), and also Research Personnel who work with *Mycobacterium tuberculosis* or similar agents or with nonhuman primates. These individuals will be grouped as **TB Surveyed Personnel**. All definitions are summarized in the Definitions section.

2. Reason for Policy

The purpose of this policy is to protect the health and safety of the University Community and to reduce the risk of transmission of tuberculosis (TB) infection.

3. Who Should Read This Policy

This policy shall apply to all Rutgers employees, including faculty, staff, interns, residents, clinical fellows; post-doctoral fellows; all individuals who have accepted an offer of employment; and volunteers who will work or be assigned as TB Surveyed Personnel on Rutgers premises. [University Policy 100.3.3: Housestaff Immunizations and Health Requirements](#) mandates that housestaff meet the requirements of this Policy (100.3.2: Tuberculosis Surveillance). All individuals listed will hereafter be referred to as "personnel." See also, Section VII. EXEMPTIONS / EXCEPTIONS.

Contract agencies shall be required by contract to follow all Occupational Safety and Health Administration (OSHA) regulations and Centers for Disease Control and Prevention (CDC) recommendations, including those concerning TB. Such contract agencies shall provide documentation to University Human Resources and to the University administrator for their contract(s) concerning the following: TB surveillance, prevention and control, and education activities, including baseline, two-stage, periodic TB testing and symptom surveys, and respirator fit testing for their employees who work in Rutgers patient care service areas and/or perform patient care activities or research with potential exposure to *M. tuberculosis* or nonhuman primates.

Student requirements are specified in [University Policy 10.3.13: Student Immunizations & Health Requirements](#).

4. Resources

- A. [University Policy 10.3.13: Student Immunizations & Health Requirements](#)
- B. [University Policy 100.3.3: Housestaff Immunizations and Health Requirements](#)
- C. [Centers for Disease Control and Prevention \(CDC\) "Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection," Morbidity and Mortality Weekly Report, June 9, 2000, 49\(RR06\); 1-54.](#)
- D. [New Jersey Department of Health and Senior Services Public Employees Occupational Safety and Health Program "Requirements for Preventing Occupational Exposure to Tuberculosis," revised November 2004.](#)
- E. [CDC. Guidelines for using the QuantiFERON-TB Gold Test for Detecting *Mycobacterium tuberculosis* infection, United States. MMWR 2005;54\(No. RR-15\):49-55.](#)
- F. [CDC. Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005. MMWR2005;54 \(No.RR-17\): 1-141.](#)
- G. [CDC. Tuberculosis Screening, Testing, and Treatment of United States Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019. MMWR 2019;68 \(No. 19\): 439-443.](#)
- H. [National Research Council. Occupational Health and Safety in the Care and Use of Research Animals. National Academy Press, Washington, DC 1997.](#)
- I. [University Policy 100.3.1: Influenza Immunization Policy for Covered Individuals](#)

5. Definitions

High Risk Category: Refers to areas or occupational groups in which: (a) employee purified protein derivative (PPD) conversion rates were significantly greater than for areas or groups in which occupational exposure to *Mycobacterium tuberculosis* was unlikely or than previous rates for the same area or occupational group, and epidemiological evaluation suggests nosocomial transmission; or (b) a cluster of PPD test conversions occurred, and epidemiological evaluation suggests nosocomial transmission of *M. tuberculosis*; or (c) possible person-to-person transmission of *M. tuberculosis* has been detected.

Areas of potential increased occupational risk for TB exposure: As noted by the CDC. At Rutgers, includes clinicians in the Global TB Institute, pulmonary medicine, emergency medicine, anesthesiology, University Correctional Health Care (UCHC), and respiratory therapy, researchers in laboratories that use *M. tuberculosis* and related bacteria, and all personnel who work with non-

human primates. In accordance with the National Research Council "Occupational Health and Safety in the Care and Use of Research Animals."

CDC: Centers for Disease Control and Prevention. A United States federal agency, under the Department of Health and Human Services.

Clinical Area: All patient care areas, even if the Covered Individual is not providing clinical care. These areas may include, but are not limited to, outpatient offices and clinics, patient waiting rooms, patient rooms, and meeting rooms used for patient/family consults. Please see [University Policy 100.3.1: Influenza Immunization Policy for Covered Individuals](#).

Covered Individual: A Rutgers University clinical faculty or clinical staff member who has contact with a patient in a Clinical Area and all Rutgers University "Public Safety Personnel" at all locations, regardless of whether they have a routine presence in a "Clinical Area" or have routine contact with patients. Please see [University Policy 100.3.1: Influenza Immunization Policy for Covered Individuals](#).

Interferon Gamma Release Assay for TB (IGRA): In vitro blood tests which aid in diagnosing *Mycobacterium tuberculosis*. The tests detect the release of interferon-gamma in prepared whole blood from patients sensitized to TB.

Latent TB Infection (LTBI): A condition in which living tubercle bacilli are present in the body, but the disease is not clinically active. Infected individuals usually have positive tuberculin reactions, but they have no symptoms related to the infection and are not infectious. However, infected individuals remain at lifelong risk for developing disease unless preventive therapy is given.

PEOSH: Public Employees Occupational Safety and Health Program. Under the State of New Jersey Department of Health, develops and enforces occupational health standards for public employees.

TB: Tuberculosis. A highly contagious infection caused by the bacterium *Mycobacterium tuberculosis*.

TB Case: A particular episode of clinically active TB disease. This term should be used only to refer to the disease itself, not the patient with the disease. By law, cases of TB must be reported to the local health department.

TB Cluster: Two or more TST conversions occurring within a 3-month period among personnel in a specific area or occupational group, and epidemiologic evidence suggests occupational (nosocomial) transmission.

TB Surveillance Test (TST): Includes TB skin testing, interferon gamma release assay testing and symptom survey completion, as indicated

TB Surveyed Personnel: Healthcare Personnel and Public Safety Personnel, as originally defined in [University Policy 100.3.1: Influenza Immunization Policy for Covered Individuals](#), and also Research Personnel who work with *Mycobacterium tuberculosis* or similar agents or with non-human primates.

Tuberculosis Test Conversion: A change in TB surveillance test results from negative to positive. A conversion within a 2-year period is usually interpreted as new M. tuberculosis infection, which carries an increased risk for progression to active disease. A booster reaction may be misinterpreted as a new infection.

Public Safety Personnel: Employees of Rutgers University under the command of the Rutgers University Executive Director of Public Safety/Chief of University Police.

6. The Policy

A. Requirements

1. Pre-Placement Testing

- a. At the time a position is offered, candidates for TB Surveyed Personnel positions shall be informed of the TB testing requirements by the Human Resources Generalist. Candidates for faculty positions shall be informed by the hiring department.
- b. All new TB Surveyed Personnel shall undergo a TB surveillance test (TST) using the TB skin test, Mantoux method, 5 tuberculin units of purified protein derivative (PPD) injected intradermal before starting work, unless exempted pursuant to this policy. If the individual has a documented positive TB skin test, then a Food and Drug Administration (FDA) - approved interferon-gamma-release assay for TB (IGRA), e.g., the QuantiFERON-TB Gold Plus test or the T-Spot. TB assay, may be used. Please see EXHIBIT A, TB Surveillance Algorithm.
- c. If the result of any new personnel's TB skin test taken before starting work is negative, a second TB skin test shall be performed 1-3 weeks after the first test. This second test may be performed after the individual begins work. If the second test is positive, this is most likely a boosted reaction and the individual shall be considered to have been previously infected and managed in accordance with this policy. This two-step method shall be used in order to detect boosting phenomena that might be misinterpreted at subsequent testing as a new infection.
- d. If the result of any new personnel's TB skin test taken before starting work is negative, and the individual has a documented negative TB skin test within 12 months of starting work, a second TB skin test is not needed at baseline.
- e. If the initial TST result is positive and the individual is diagnosed with latent TB infection (LTBI), the individual will have a focused review of history and physical examination, a chest x-ray (posteroanterior), and will be counseled and be referred for treatment, if not already treated for LTBI. If the individual is not treated, that individual shall have an annual symptom survey thereafter.
- f. At the time of TB testing, if a diagnosis of active TB is clinically suspected, the individual shall not be allowed to begin work until a diagnosis of active TB disease has been excluded, or unless the individual is documented to be on therapy and a determination has been made by the campus Occupational Health office that the individual is noninfectious. The individual will be handled using appropriate infection control methods and be referred for immediate follow-up and evaluation.

All policies are subject to amendment. Please refer to the Rutgers University Policy Library website (policies.rutgers.edu) for the official, most recent version.

- g. If an individual is tested with an IGRA, the results will be interpreted according to guidelines issued by the CDC, FDA, and manufacturer. A second IGRA is not needed at baseline.

2. Periodic Testing

- a. If the initial TST result is negative, periodic TB skin testing or IGRA testing shall be performed, based on the initial test, as required by the Public Employees Occupational Safety and Health (PEOSH) Program for all TB Surveyed Personnel who work in areas of potential increased occupational risk for TB exposure, as detailed in Definitions. All other TB Surveyed Personnel who have negative baseline 2-step TB skin testing or IGRA testing will not be routinely tested annually, *unless otherwise directed or required by the appropriate campus "Occupational Health" office.*
- b. For TB Surveyed Personnel who get periodic TB skin testing or IGRA, convert and are diagnosed with LTBI, the individual will have a focused review of history and physical examination, a chest x-ray (posteroanterior), be counseled and be referred for treatment. Such personnel will be referred to Risk Management and Insurance for evaluation if they report possible work-relatedness.
- c. Annual testing for TB Surveyed Personnel in areas of potential increased occupational risk will be conducted based upon the date of the individual's latest TST, except as follows:

All personnel who work in areas of ongoing transmission or high-risk patient care areas as defined by PEOSH (see High Risk Category, in Definitions) will be given a TST every **8 to 10 weeks**.
- d. TB Surveyed Personnel with a positive TB skin test or IGRA who are diagnosed with LTBI, whether determined at hire or during the course of employment, but do not document completion of treatment for LTBI, shall undergo annual TST using a symptom survey. The symptom survey will include those questions currently recommended by the CDC and may be done online as part of the annual medical screening for respirator fit testing. Each year, the individual will be provided education concerning LTBI and treatment options and will be strongly encouraged to be treated for LTBI.
- e. If the online symptom survey indicates potential TB disease, then the individual will be contacted to come to the Occupational Health office for immediate evaluation.
- f. When the campus director of Occupational Health determines that other TB testing is advisable, (e.g. a TB cluster has occurred or potential exposure to a documented TB case) (see Definitions), the Director may contact personnel to administer testing for TB.

B. Responsibilities

- 1. Personnel with a history of Bacille Calmette-Guerin (BCG) vaccination are not exempt from the TB testing. Anyone with a history of BCG vaccination with a positive TB skin test result may be offered an IGRA to determine whether the

TB skin test result is a reaction to the BCG, but otherwise is considered to have LTBI and will be managed as stated in this policy (Section 6.B.4).

2. All TB skin tests and IGRAs must be administered, read, and interpreted in accordance with current PEOSH requirements, and shall be performed by trained personnel at the respective campus Occupational Health office. Rutgers approved offices must forward all records to the appropriate campus Occupational Health director.
3. Personnel who have initial positive TST results, subsequent TST conversions, or symptoms suggestive of TB must be evaluated promptly for active TB disease. This evaluation should include a history, clinical examination, and/or a chest X-ray (posteroanterior). If the history, clinical examination, and/or chest X-ray is compatible with active TB disease, the individual will be referred for additional tests, such as sputum microscopy and culture. If symptoms compatible with active TB disease are present, personnel shall be excluded from work until either (a) a diagnosis of active TB disease is ruled out, or (b) a diagnosis of active TB disease is established, treatment is begun, and a determination is made by the campus Occupational Health director that the personnel are noninfectious.
4. Personnel who have LTBI should be evaluated for therapy according to published CDC guidelines. If the evaluation for active TB disease, treatment for TB, and/or therapy for LTBI are carried out at a facility other than at the campus Occupational Health office, all test results and documentation of care must be provided to the appropriate campus Occupational Health director. Personnel with LTBI shall not be restricted from normal work activities.

C. Enforcement

Compliance with this policy is a condition of employment and continuation of employment. Personnel shall not be permitted to have contact with patients and non-human primates unless they have received TB surveillance testing and any required follow-up. An individual's direct supervisor may take disciplinary action up to and including termination of work for personnel who fail to comply with their TB testing obligation. Any such termination shall be in consultation with the Human Resources Generalist.

VII. EXEMPTIONS/EXCEPTIONS

Other than the exceptions/exemptions listed below, this policy shall apply to all personnel.

A. Prior Documentation

Documentation of having met the requirements of this policy may be accepted at the discretion of the campus Occupational Health director.

B. Medical Contraindications

Personnel may be exempted from TST if there is a medical contraindication and if failure to receive testing does not prevent fulfillment of the requirements of the job. Such personnel must present a written statement from a physician licensed to practice medicine in the United States stating that the TST is medically contraindicated, and giving the reasons for the contraindication and its duration, if not permanent. The

written physician's statements shall become part of the personnel's health record and shall be reviewed by the appropriate campus employee healthcare provider. When a medical contraindication no longer exists, the personnel must then comply with the policy's requirements.

C. Other Exemptions

Exemptions to this policy may be made by the campus directors of Occupational Health based upon medical considerations.

VIII. EXHIBIT A

Exhibit A
TB Surveillance Algorithm
9/21/17/2020

