

Policy: Any employee having direct client contact must have a TB skin test via the Mantoux method administered upon hire, second step and annual testing. The testing will be offered at no cost to the employee. The test includes screening, pre-placement evaluation, administration and interpretation of results of the TB Mantoux skin test.

Date Revised: April 20th 2020

Purpose: To ensure adequate health status of each employee, ensuring all agency employees are screened and free from tuberculosis before and while continuing to provide direct client care.

Protocol:

NEW EMPLOYEES

On all employees providing direct client care, it is required documentation of a tuberculin TB skin test via Mantoux method using the two-step testing. If there are documented results provided evidencing a negative TB skin test within 12 months prior to employment, for new employees, testing completed at the time of hire will fulfill the two-step requirement. If an employee does not have documented evidence of a negative TB skin test within the past 12 months from date of hire, the TB skin test (Mantoux method) will be given at the time of hire and repeated within two to three weeks after the initial test.

Health care employees with a documented history of a prior positive TB skin test, should receive a risk assessment and symptom screening upon hire, including providing documentation.

TB screening and skin testing via the Mantoux method will be administered on all employees providing direct client care annually.

Administration of the TB skin test via Mantoux method may be performed in the agency by a Registered Nurse (RN), licensed Practical Nurse (LPN) or a Medical assistant (MA). The TB skin test consent and results shall be documented. The TB skin test results shall be evaluated by an RN, LPN, or MA within forty-eight (48) to Seventy-two (72) hours post administration and documented result in millimeters of induration.

Most Persons can receive a TST. TST is contraindicated only for persons who have had a severe reaction (e.g, necrosis, blistering, anaphylactic shock, or ulcerations) to a previous TST. It is not contraindicated for any other persons, including infants, children, pregnant women, persons who are HIV-infected, or persons who have been vaccinated with BCG.

The TST is performed by injecting 0.1 ml of Tuberculin purified protein derivative (PPD) into the inner surface of the forearm. The injection should be made with a tuberculin syringe, with the needle bevel facing upward. The TST is an intradermal injection. When placed correctly, the injection should produce a pale elevation of the skin (a wheal) 6 to 10 mm in diameter

Skin test interpretation depends on two factors:

- Measurement in millimeters of the induration
- Person's risk of being infected with TB and of progression to disease if infected
- Record measurement in millimeters, **If no induration record as 0 mm**

An induration of 5 or more millimeters is considered positive in

- HIV-infected person
- A recent contact of a person with TB disease
- Persons with fibrotic changes chest radiograph consistent with prior TB
- Patients with organ transplants
- Persons who are immunosuppressed for other reasons (e.g., taking the equivalent of >15 mg/day of prednisone for 1 month or longer, taking TNF- α antagonists)

An induration of 10 or more millimeters is considered positive in

- Recent immigrants (<5 years) from high-prevalence countries
- Injection drug users
- Residents and employees of high-risk congregate settings
- Mycobacteriology laboratory personnel
- Persons with clinical conditions that place them at high risk
- Children <4 years of age
- Infants, children, and adolescents exposed to adults in high-risk categories

A tuberculin reaction of 15mm or more, in all other persons, significant results shall require documentation of medical evaluation, which may consist of chest x-ray and/or prophylactic antibiotic therapy.

What are False Positive Results

Some persons may react to the TST even though they are not infected with *M. tuberculosis*. The causes of these false-positive reactions may include, but are not limited to, the following:

- Infection with nontuberculous mycobacteria
- Previous BCG vaccination
- Incorrect method of TST administration
- Incorrect interpretation of reaction
- Incorrect, expired bottle of antigen used

What are False Negative Results

Some persons may not react to the TST even though they are infected with *M. tuberculosis*. The reasons for these false-negative reactions may include, but are not limited to, the following:

- Cutaneous anergy (anergy is the inability to react to skin tests because of a weakened immune system)
- Recent TB infection (within 8-10 weeks of exposure)
- Very old TB infection (many years)
- Very young age (less than 6 month old)
- Recent live-virus vaccination (e.g., measles and chickenpox)
- Incorrect method of TST administration
- Incorrect interpretation of reaction

Following the baseline TB skin testing, repeat skin testing will be completed at least once a year; after any possible exposure and as directed by the state health department due to local outbreaks of the disease.

If the employee has had a significant reaction to a Mantoux test upon employment or with the two (2) years prior to working in a position involving direct client contact, or has had a significant reaction to a Mantoux test in repeat testing during the course of employment, the employee and agency must have a documentation of a negative chest x-ray. Negative chest x-ray documentation applies for five (5) years and not needed annually, unless warranted.

If an employee has had a significant reaction to a Mantoux test more than two (2) years prior to working in a position involving direct client contact, the employee must provide documentation of a non-significant chest x-ray taken with the previous 12 months of documentation that they have completed, or are currently completing a course of tuberculosis preventive therapy.

Employees who have been exposed to active tuberculosis must document a non-significant result of the Mantoux test or chest x-ray no earlier than 8 weeks and no later than 10 weeks after exposure.

Employees shall require a repeat chest x-ray if signs and symptoms of active tuberculosis are present. Symptoms include:

Fever

Night sweats

Low grade fever

Productive cough

Cough of blood

Chest pain

Note: Absence of a reaction to the tuberculin test does not exclude the diagnosis of tuberculosis or tuberculosis infection.

Cell mediated responses such as tuberculin reactions may decrease or disappear during any severe or febrile illness, infection, or after corticosteroid or immunosuppressive administration.

Additional tests may be required as directed by the State Health Department or as recommended by the health professional performing the health screening. The intent is to limit the risks to clients, caregivers, and/or other employees.

Documentation to include information obtained (other than occupational exposure and post exposure evaluation and follow up) during the health screening. The documentation shall be maintained in the employees medical file. This information is confidential. The administrator may be informed of work restrictions of disabled persons and of necessary accommodations required. Other health care personnel may be informed of an individual's health screening results only in emergency situations in accordance with local, state, and federal laws.