

HEALTHWEST

PROCEDURE

No. 07-005

Revised by:

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Environment of Care Committee

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Approved by:

Subject: Tuberculosis Infection Control

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I. PURPOSE

To educate and protect internal and external individuals of HealthWest services regarding the potential risk of exposure to active tuberculosis in the workplace.

II. APPLICATION

All internal and external customers of HealthWest.

III. DEFINITIONS

- A. Active Tuberculosis: There is clinical evidence of disease.
- B. Symptoms of Tuberculosis: Loss of appetite, excessive fatigue or weakness, unexplained weight loss, fever lasting longer than one week, night sweats, persistent or unexplained cough lasting more than three weeks, coughing up blood, pink or rust-tinged sputum.
- C. Transmission: Tuberculosis bacterium are carried in airborne particles, known as droplet nuclei, generated when persons with pulmonary or laryngeal tuberculosis sneeze, cough, speak, spit or sing. Particles are 1-5 microns in size. Covering the mouth and nose when coughing or sneezing is an important method of preventing the spread of tuberculosis bacterium because it keeps droplets from becoming airborne.
- D. Inactive Tuberculosis: A significant reaction to a tuberculin skin test in the absence of clinical evidence of disease. A person with inactive tuberculosis has the tuberculosis bacterium in their body, but they have no symptoms and are not contagious because the bacterium is inactive. If left untreated, about 10% would go on to develop the active, infectious form of tuberculosis sometime in their life.
- E. Mantoux Skin Test (PPD-T): A skin test for tubercular infection in which a tuberculin purified protein derivative is injected intradermally into the forearm and the results are read in 48 to 72 hours.

- F. Insignificant (Negative) Mantoux Skin Test Reaction: No induration (swelling/bump) whatsoever at the site of intradermal injection within 48-72 hours. If the diameter of induration is greater than 5 mm, refer to the CDC TB Elimination attachment. The diameter of induration is recorded in mm, not as the word negative.
- G. Significant (Positive) Mantoux Skin Test Reaction: The development of 15 mm or greater of induration (swelling/bump) at the site of injection within 48-72 hours in persons with no known risk factors for TB. The diameter of induration is recorded in mm not as positive. Erythema (redness) without induration is considered of no significance. Persons with HIV infection with a reaction greater than 5 mm are considered positive.
- H. Two-Step Testing: Two-step testing is useful for the initial skin testing of adults who are going to be retested periodically, such as health care workers. This two-step approach can reduce the likelihood that a boosted reaction to a subsequent Tuberculin Skin Test will be misinterpreted as a recent infection.
 - 1. Return to have first test read 48-72 hours after injection.
 - 2. If first test is positive, consider the person infected.
 - 3. If first test is negative, give second test 1-3 weeks after first injection.
 - 4. Return to have second test read 48-72 hours after injection.
 - 5. If second test is positive, consider person previously infected.
 - 6. If second test is negative, consider person uninfected.
- I. Newly Infected Person (Converter): There has been a significant change in the annual Mantoux skin test reaction from the last test to the current one.
- J. Individuals at Risk for Exposure to Active Tuberculosis: Individuals who have frequent, prolonged contact in a confined, poorly ventilated area with a person who has untreated active tuberculosis.

IV. PROCEDURE

- A. Employee Education and Training
 - 1. Trainers or contracted trainers will provide all employees with tuberculosis (TB) awareness training within ten (10) days of hire. This training program shall contain, at a minimum, information to ensure employee knowledge of such issues as the risk of TB transmission, its epidemiology, symptoms, surveillance and testing, treatment therapy, protective measures to be taken to minimize the risk of occupational exposure and handling of TB exposure incidents. Employees will receive update training as new information becomes available or at least every five (5) years.
 - 2. The hiring supervisor will assure that new employees receive initial TB Awareness Training within ten (10) working days of hire, and are updated as new information becomes available.

3. The HealthWest Trainers will assure that training opportunities are available to meet the requirements of this policy. The HealthWest Training Department will keep a record of TB Awareness Training events and employee attendance.

B. Routine Screening and Surveillance

1. HealthWest Personnel

- a. All individuals, prior to employment, will receive a Mantoux skin test unless a previously positive reaction has been documented. If a positive reaction has been documented, the agency will require a baseline chest x-ray. Documentation of compliance with initial and subsequent Mantoux testing will be maintained by the County and the HealthWest Employee Resource Coordinator. All new hire individuals will be asked at orientation to sign an Authorization to Transfer Medical Records and Waiver of Confidentiality (A193). The HealthWest Resource Coordinator will send the Authorization to Transfer Medical Records and Waiver of Confidentiality to County Human Resources to obtain a copy of the pre-employment physical examination which contain the TB test results.
- b. If the individual will be working in a state licensed residential area, the second Mantoux test of the two-step testing will be required within one month of employment and then a single TB test will be required every three (3) years thereafter.
- c. The agency will offer tuberculosis testing per employee request through a HealthWest employed and trained Registered Nurse, who is credentialed by Public Health department to give TB skin tests and/or a contracted health care provider at least every three (3) years. HealthWest employees who work in the agency's licensed residential program will be required to participate in every three (3)-year testing. Supervisor can arrange with nursing for elected testing to be completed. TB test results will be forwarded by the registered nurse to the HealthWest Employee Resource Coordinator and also to the site manager for licensed residential programs.
- d. In situations where an employee has been exposed to active tuberculosis, the agency may require the employee to participate in testing and follow-up treatment based upon the recommendation of the Public Health department and/or other counsel. The employee will not be charged for this service. Employees with a previous documented significant Mantoux reaction will be required to complete and sign a Tuberculosis Screening Questionnaire (A188) annually and return completed form to the HealthWest Employee Resource Coordinator.
- e. The Residential Supervisor will be responsible to notify employees of the need for tuberculosis testing.

- f. If an employee who has had a negative Mantoux skin test in the past converts to a positive Mantoux skin test, the agency's contracted health care provider will provide further evaluation and follow-up treatment as deemed necessary. Employees will not be charged for this service.

2. Employee Surveillance

- a. An employee who exhibits the symptoms of active tuberculosis between the testing dates should notify their supervisor to arrange for tuberculosis testing with the agency's contracted health care provider.
- b. If an employee is diagnosed with active tuberculosis, they will not be allowed to return to work until treatment has been instituted and a written release to return to work is given by their personal physician and/or the agency's contracted health care provider.

3. HealthWest Client Surveillance

If a HealthWest employee recognizes the symptoms of active tuberculosis in an individual receiving HealthWest services, the employee should request that a HealthWest nurse assess the client's symptoms. If deemed necessary, the nurse should refer the individual to their personal physician or the Public Health department for a Mantoux skin test. The nurse should request from the individual/guardian written consent for HealthWest to exchange information with the medical provider. The agency will reserve the right to refuse services or treatment based upon the individual's willingness or lack thereof to comply with the testing. (Refer to Policy # 04-003)

C. HealthWest Response to TB Exposures Incidents

1. If an employee recognizes the symptoms of active tuberculosis in an individual or fellow employee and the employee is concerned that they have been exposed to active tuberculosis, they should notify their supervisor immediately. The supervisor of the affected employee shall refer to County Personnel Rule # 17 entitled Work Connected Injury or Illness. If needed, in consultation with the Public Health Department, this agency will take appropriate environmental precautions to reduce or eliminate the risk of exposure to employees and or individuals of HealthWest services during testing and follow up treatment of individuals suspected to having active tuberculosis.
2. If a suspected case is confirmed by testing to be active tuberculosis, those employees who were exposed to the individual will be given a Mantoux skin test immediately by the agency's contracted health care provider or the Public Health Department, unless there is a documented history of previous significant reaction. Those employees with a previously documented positive skin test will be referred to the agency's contracted health care provider to be evaluated for signs and symptoms of active tuberculosis. The employee will not be charged for this service.

- a. Those employees who demonstrate non-reactive results to the skin test will be retested at the recommendations of the Public Health Department or the agency's contracted health care provider after the exposure ended.
 - b. Those employees who demonstrate significant reaction to the skin test will receive follow-up treatment as recommended by the agency's health care provider.
3. If an individual of HealthWest services has been exposed to an individual with active tuberculosis, the responsible program supervisor will refer the individual to their personal physician or the Public Health Department for a Mantoux skin test and follow-up treatment if necessary. The program supervisor should request written consent from the individual/guardian for HealthWest to exchange information with the medical provider.
 4. HealthWest will cooperate with the Public Health Department in the evaluation, testing, and follow-up treatment in all confirmed cases of active tuberculosis.

D. Data Collection and Reporting

HealthWest Human Resources will report an employee's positive Mantoux skin test, even on baseline testing, (except pre-employment screening) to the Muskegon County Personnel Department. HealthWest Employee Resource Coordinator will maintain a record of the Mantoux skin test results (A189), medical evaluation, and treatment in the employee's Human Resource file.

V. REFERENCES

Center for Disease Control (CDC)
Occupational Safety and Health Administration (OSHA)
Muskegon County Public Health Department

Attachments: CDC Tuberculosis Fact Sheet
CDC TB Elimination
Assessment for TB skin testing form (A187)
Screening Questionnaire for individuals with a previous reaction & chest x-ray (A188)
Mantoux Tuberculin Skin Test Record (A189)
Authorization to Release Medical Records and Waiver of Confidentiality (A193)

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