



DIVISION OF DEVELOPMENTAL DISABILITIES
Olympia, Washington

TITLE: PREVENTING THE TRANSMISSION OF POLICY 9.09
MYCOBACTERIUM TUBERCULOSIS IN THE WORKPLACE

Authority: WAC 388-97-005, 388-97-140, 388-97-147
Morbidity and Mortality Weekly Report (MMWR), 12/30/05, (182 pages),
["Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health-Care Facilities, 2005"](#)

PURPOSE

This policy establishes requirements for Residential Habilitation Centers (RHCs) operated by the Division of Developmental Disabilities (DDD) to:

- A. Protect individuals residing or working in environments that place them at a reasonably anticipated risk of exposure to the airborne pathogen, *M. tuberculosis* (*Mycobacterium tuberculosis*), from occupational exposure to this organism.
- B. Establish measures which help detect, prevent and control the risk of *M. tuberculosis* transmission.
- C. Ensure effective pre-screening, post-exposure follow-up, treatment or referral for treatment, and reporting of communicable airborne diseases.

SCOPE

This policy applies to all DDD clients, employees, student interns and volunteers who reside or work at RHCs.

DEFINITIONS

Airborne pathogen is a disease-causing microorganism that is transmitted or spread through the air.

Conversion is a change in tuberculin skin test (TST) results from negative to positive. A conversion within a two-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.

Epidemiology is the study of the growth and spread of an infectious disease.

Immunosuppressed means a condition in which the immune system is not functioning normally (e.g., severe cellular immunosuppression resulting from HIV infection or immunosuppressive therapy). Immunosuppressed persons are at greatly increased risk for developing active TB after they have been infected with *M. tuberculosis*.

Infection means the condition in which organisms capable of causing disease (e.g., *M. tuberculosis*) enter the body and elicit a response from the host's immune defenses. TB infection may or may not lead to clinical disease.

Infectious means capable of transmitting infection. When persons who have clinically active pulmonary or laryngeal TB disease cough or sneeze, they can expel droplets containing *M. tuberculosis* into the air. Persons whose sputum smears are positive for AFB are probably infectious.

Mycobacterium tuberculosis (*M. tuberculosis*) is a rod-shaped (AFB) microscopic organism that can cause an infection in humans, generally in the lungs and usually transmitted by the inhalation of droplet nuclei in the air.

Pathogenesis is the origination and development of a disease.

Symptomatic means having symptoms that may indicate the presence of TB or another disease.

TB Gold Test is a one step blood assay test. Current test being used is called QuantiFERON™

Transmission is the spread of an infectious agent from one person to another. The likelihood of transmission is directly related to the duration and intensity of exposure to *M. tuberculosis*.

Tuberculin skin test (TST) is a diagnostic aid for finding *M. tuberculosis* infection. A small dose of tuberculin is injected just beneath the surface of the skin, and the area is examined for induration by palpation 48 – 72 hours after injection.

Tuberculosis (TB) is an airborne communicable disease caused by *M. tuberculosis* or the tubercle bacillus.

POLICY

DDD clients, employees, student interns or volunteers who can reasonably anticipate occupational exposure to the airborne pathogen, *M. tuberculosis*, shall be afforded all necessary protection to reduce the likelihood of exposure to, transmission of, and possible infection with *M. tuberculosis*. Individuals with suspected or diagnosed infectious tuberculosis (TB) will be transferred to an appropriate treatment facility and shall not return to finish treatment at a RHC until medically safe.

PROCEDURESA. Assignment of Responsibility

1. Each RHC shall assign supervisory responsibility for a TB infection control program.
2. The individual(s) assigned must have expertise in infection control, occupational health and engineering, and must be given the authority to implement and enforce TB infection control policies.
3. If supervisory responsibility is assigned to a committee, one individual must be designated as the primary TB contact person.

B. Risk Assessment

Each facility shall develop and implement a written TB infection control plan. Elements of the plan must meet the requirements for the risk group as referenced in Appendix B, "Tuberculosis (TB) Risk Assessment Worksheet" (Morbidity and Mortality Weekly Report (MMWR), 12/30/05, Vol. 54/No. RR-17, pp. 9-13).

C. Detection of Active TB in Clients

1. Early identification of individuals with latent or active TB infection shall be accomplished through two-step baseline on admission, and annual screening thereafter (except in Nursing Homes where annual screening is not required by federal or state law).
2. Each facility's TB infection control plan must include protocols for identification, evaluation, and referral of individuals who may have latent or active TB infection.

D. Management and Isolation of Clients with Possible TB

1. Arrangements for transfer to an appropriate facility shall be made for any individual suspected or diagnosed with infectious TB. These arrangements will be made in accordance with the facility's protocol.
2. Persons responsible for transporting and caring for the individual prior to leaving the facility will be provided appropriate respiratory protection.
 - a. A respiratory protection program is required at all facilities in which respiratory protection is used.
 - b. Respiratory protection devices shall meet recommended performance criteria as detailed in the MMWR (12/30/05, Vol. 54/No. RR-17, pp. 38-42).
3. Cough-inducing procedures or sputum cultures for the diagnosis of TB shall not be performed at a RHC.
4. Local County health standards apply regarding isolation of active and suspected cases, and consultation is required as part of the TB reporting process.

E. Staff Education

1. All staff and volunteers shall receive annual TB education appropriate to their work responsibilities and duties.
2. Training must include, at a minimum, the following topics:
 - a. Epidemiology of TB in the facility;
 - b. Concepts of the pathogenesis of TB and occupational risk; and
 - c. Work practices that reduce the likelihood of *M. tuberculosis* transmission.

F. Staff Counseling, Screening and Evaluation

1. Counseling will be provided to individuals as indicated by the facility's infection control program. Counseling will include information about the increased risk to immunosuppressed persons.
2. Tuberculin Skin Tests (TSTs) Step 1 or Step 2 method shall be performed on staff and volunteers within three (3) working days from the start date of their

employment, and repeated at least annually (Centers for Disease Control and Prevention guidelines for two-step method).

3. Individuals with a reaction to the TST of 5mm or greater shall be evaluated by the Infection Control Nurse or Environmental Health Officer. A symptom review shall be completed and a determination made regarding the work status of the employee.

A chest x-ray will be done within five (5) days of the initial positive skin test and then only when symptoms are present.

4. Individuals with pulmonary or laryngeal TB shall be excluded from the workplace until they are noninfectious as described in the MMWR (12/30/05, Vol. 54/No. RR-17, p. 31).
5. A TST conversion on any employee must be documented on [DSHS 03-133](#), *Employee Volunteer Personal Incident Report*, and the OSHA 300 log.
6. Surveillance screening data, including TST conversions, must be collected in accordance with the Department of Health requirements.

G. Exposure Investigation and Evaluation of Conversions and Transmission

1. Epidemiologic investigations may be conducted for several situations. Problem evaluations shall be conducted as described in the MMWR (12/30/05, Vol. 54/No. RR-17, pp. 32-36).
2. Each facility shall develop procedures for investigations and follow up.

H. Liaison with Public Health Department

Each facility's TB infection control program must include a system for reporting any active or suspected infectious TB cases to the local public health department and following their recommendations. Isolation requirements, along with treatment protocols, may be dictated by local conditions.

- I. The TB Gold test (i.e., QuantiFERON™) for *M.tuberculosis* may be substituted for TST as appropriate. The blood test does not substitute for chest x-ray (CXR) when it is indicated.

EXCEPTIONS

No exception to this policy may be made without the prior written approval of the Division Director.

SUPERSESSSION

DDD Policy 9.09
Issued October 1, 2007

Approved: /s/ Linda Rolfe
Director, Division of Developmental Disabilities

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