

TUBERCULOSIS PROTECTION PROGRAM

Program Element

R2-10-207(11)(n)

Each agency shall develop, implement, and monitor a Tuberculosis Protection Program, as applicable.

A Tuberculosis Protection Program is required if an agency employee is exposed to “an existing or potential health hazard within an agency, or that agency personnel may be exposed to during the course of work.” “The program shall include procedures to notify employees of health hazards, medical monitoring when applicable, and personal protective equipment requirements including training, fit testing, and care.”

Tuberculosis (TB) is a communicable, potentially lethal disease transmitted through the bacterium *Mycobacterium (M) Tuberculosis*. Exposure can occur when infected persons cough, speak, spit, or sneeze droplets dispersed in the air where others can inhale it. Some affected occupational groups include health-care workers, emergency and first responders, workers in correctional and detention facilities, law enforcement, laboratory technicians handling infected samples, long-term residence facility employees, and workers providing state services in close proximity to persons infected with TB.

Currently, OSHA does not have a standard specifically for *M. Tuberculosis*. However, protection for workers is achieved through the General Duty Clause of the OSH Act Section 5(a) (1), the Respiratory Standard 29 CFR 1910.134, Specifications for Accident Prevention Signs and Tags Standard 1910.145, and the Centers for Disease Control "Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005." The Arizona Department of Health Services has also issued the Arizona Tuberculosis Control Manual developed from CDC guidelines to direct control activities within the state.

Definition:

A Tuberculosis Protection Program establishes guidelines and procedures that assist in exposure assessment, application of control methods, training, and medical surveillance. The program focuses on health care settings but most principles can be applied to all worker settings where there is potential exposure to persons infected with TB.

<p>Why do I need this program?</p>	<p>A program is needed to reduce TB exposure incidents from persons with contagious forms of the disease to uninfected workers. A second objective is to identify settings in which a high risk exists for transmission of M. tuberculosis, and the application of effective infection control measures.</p>
<p>How do I know if this program applies to my agency and my specific job hazards?</p>	<p>This program is necessary for agencies with employees that have the potential for exposure to TB infected patients or clients. To determine the extent of program elements required for your agency program, refer to the CDC Guidelines, "Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005", Appendix A. To evaluate risk, consider using Appendix B - Tuberculosis (TB) Risk Assessment Worksheet.</p>
<p>What are the minimum required elements and best practices for a Tuberculosis Protection Program?</p>	<p>Guidelines and Criteria: A TB infection-control program is based on a three-level hierarchy of controls including administrative, engineering or environmental, and respiratory protection.</p> <p>The program should be in writing and responsibilities assigned for prompt detection, airborne precautions, and treatment of suspected or confirmed TB patients or clients. The program shall include a documented survey of the agency's facilities and work practices to identify areas of concern.</p> <p>Depending on the work setting, administrative controls consist of:</p> <ul style="list-style-type: none"> • Implementing work practices for testing and laboratory processing • Management practices for patients with suspected or confirmed TB • Cleaning, sterilization and disinfection • Education and training of workers to focus on identifying symptoms and prevention of disease transmission • Screening and evaluating workers who may have been exposed • Using signage to instruct for proper respiratory use and cough etiquette

- When required, reporting to the local health department

Engineering or Environmental Controls:

The CDC Guidelines (2005) recommend the following engineering controls for individuals with confirmed or suspected TB.

- Primary: Control at the source by using local exhaust ventilation (e.g., hoods, tents, or booths), and diluting and removing contaminated air by using general ventilation.
- Secondary: Control the airflow to prevent contamination of air in adjacent areas, and cleaning the air by using high efficiency particulate air (HEPA) filtration or Ultraviolet germicidal irradiation (UVGI).

Respiratory Protection:

Respirator use is required in healthcare settings where workers or visitors are entering areas with suspect or confirmed TB infections. Respirators are also required for workers where administrative and engineering controls are not feasible, such as vehicles or patient's homes.

Respirator use for TB is regulated under the General Industry Standard for Respiratory Protection 29 CFR 1910.134, and therefore requires implementing a respiratory-protection program consisting of:

- Proper selection of a NIOSH approved nonpowered particulate respirator (N-, R-, and P-series 95%, 99%, and 100% filtration efficiency), including disposable respirators, or PAPRs with high efficiency filters;
- Training and fit testing of workers wearing respiratory protection; and
- Although not a workers' compensation issue, training patients on respiratory hygiene and cough etiquette procedures will reduce the droplet exposure to employees, surrounding patients, inmates, and the general public.

Are there any mandatory training requirements or best practices that must be developed by the agency?

The agency's training program must be specific to the setting and cover the following topics:

- Epidemiology of TB, including multidrug-resistant TB and the potential for exposure within the facility; the signs and symptoms of TB, including the difference between TB infection and TB disease; the modes of transmission of tuberculosis, including the possibility of re-infection of persons with a positive tuberculin skin test.
- The agency's Infection Control Program and Respirator Program.
- The tasks or activities that may involve exposure to tuberculosis.
- The use and limitations of methods that will prevent or reduce exposure, including appropriate engineering controls, work practices, respiratory protection, and site-specific control measures.
- The selection, use, cleaning and inspection of respirators. Respirator donning, removal, and checking the fit and seals.
- The medical surveillance program.
- The procedures to follow for reporting an exposure incident, and the medical management that the agency is required to provide.
- The procedures to follow if the employee develops signs or symptoms of TB disease.
- Use of signage and labels for communication of hazards. For instance, air systems that may reasonably be anticipated to contain aerosolized *M. tuberculosis* shall be labeled "Contaminated Air-Respiratory Protection Required."

<p>Are there specific requirements for documenting the program, training, etc...?</p>	<p>It is suggested that training records be maintained at least the length of the employee's employment. Training records must include a summary of the topics covered, the date, the name, qualifications of the trainer, and the name and job classification of all persons attending the training sessions.</p> <p>All records pertaining to the employee's exposure and medical monitoring results must be retained in a confidential file for the duration of employment plus 30 years. Medical records of an employee who has worked for the agency for less than one year need not be retained by that agency if the employee is given his records upon termination. (1910.120)</p>
<p>Are there any resources available that can assist me in putting together a TB Infection Control Plan?</p>	<p>Yes. Risk Management has developed a TB Program template, which may be tailored to your agency's needs.</p> <p>The following web sites have more information on this subject.</p> <ul style="list-style-type: none"> • OSHA Tuberculosis Safety and Health Topic Page: https://www.osha.gov/SLTC/tuberculosis/index.html • OSHA Tuberculosis and Respiratory Protection Enforcement Interpretation Letter: https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=26013 • Arizona DHS Tuberculosis Control Program: http://azdhs.gov/phs/edc/odis/tuberculosis/index.htm • CDC, Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005, MMWR 2005; 54 (No. RR-17): <ul style="list-style-type: none"> ○ Appendix A of this document provides specific infection control recommendations for a variety of work settings such as correctional facilities and home based settings. http://www.cdc.gov/mmwr/pdf/rr/rr5417.pdf • CDC Fact Sheet for Non-Healthcare Settings: http://www.cdc.gov/tb/publications/factsheets/general/nonhealthcare_employers.htm