

**DRAFT
SAMPLE WRITTEN**

TUBERCULOSIS CONTROL PLAN

For Compliance With

**CENTERS FOR DISEASE CONTROL
AND PREVENTION**

and

Wyoming General Rules and Regulations

Wyoming Department of Workforce Services
OSHA Division
Consultation Program

ACKNOWLEDGEMENTS

The staff of the Wyoming OSHA Consultation Program compiled this material.

NOTE: This sample plan is provided only as a guide to assist in complying with Centers for Disease Control and Wyoming OSHA's General Rules and Regulations. It is not intended to supersede the requirements detailed in the standards. Employers should review the standard for particular requirements, which are applicable to their specific situation. Employers will need to add information relevant to their particular facility in order to develop an effective, comprehensive control plan. Employers should note that the control plan is expected to be reviewed at least on an annual basis and updated when necessary.

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The information contained in this document is not considered a substitute for any provision of the standard.

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TUBERCULOSIS CONTROL PLAN

Facility Name: _____

Date of Preparation: _____

In accordance with the CDC's and Wyoming OSHA's Rules and Regulations, the following control plan has been developed: (NOTE - if your facility has a separate Bloodborne Pathogen Exposure Control Plan, then parts of this plan do not apply.)

A. Purpose

The purpose of this control plan is to:

1. Eliminate or minimize employee occupational exposure to TB;
2. Comply with the CDC's guidelines and Wyoming OSHA's Rules and Regulations;
3. To provide guidelines that address ongoing testing, treatment, and prevention to reduce the risk of tuberculosis to employees in Wyoming.

B. Exposure Determination

OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to TB. The exposure determination is made without regard to the use of personal protective equipment (i.e. employees are considered to be exposed even if they wear personal protective equipment). This exposure determination is required to list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency. At this facility the following job classifications are in this category:

(list job classifications) _____

In addition, OSHA requires a listing of job classifications in which some employees may have occupational exposure. Since not all the employees in these categories would be expected to incur exposure to TB, task or procedures that would cause these employees

to have occupational exposure are also required to be listed in order to clearly understand which employees in these categories are considered to have occupational exposure. The job classifications and associated tasks for these categories are as follows (*or place in appendix*):

<u>Job Classification</u>	<u>Task/Procedure</u>
_____	_____
_____	_____
_____	_____
_____	_____

C. Implementation Schedule and Methodology

OSHA also requires that this plan include a schedule and method of implementation for the various requirements of the standard. The following complies with this requirement:

1. Compliance Methods

Engineering and work practice controls will be utilized to eliminate or minimize exposure to employees at this facility. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be utilized. At this facility the following engineering controls will be utilized:

The above controls will be examined and maintained on a regular schedule. The schedule for reviewing the effectiveness of the controls is as follows: (*list schedule such as daily, once/week, etc. as well as list who has the responsibility to review the effectiveness of the individual controls, such as the supervisor for each department, etc.*)

2. Persons that shall be tested

A Mantoux skin test shall be performed on all employees that come in contact with _____.

A Mantoux skin test shall be performed on all new employees. If the first test is negative,

the two-step method should be used.

A Mantoux skin test shall be performed on all employees on a yearly basis.

A Mantoux skin test may be performed whenever exposure to an infectious tuberculosis case is suspected.

3. Classification of the tuberculin reaction

- A. A tuberculin reaction of 10 mm or more is classified as positive in persons who are assigned to _____ in the State of Wyoming.
- B. Absence of a reaction to the tuberculosis test does not exclude the diagnosis of tuberculosis or tuberculosis infection. Cell-mediated responses such as tuberculosis reactions may decrease or disappear during any severe or febrile illness such as:
 - 1. measles or other exanthemas
 - 2. HIV infection.
 - a. up to 60% of patients with AIDS may have skin test reactions less than 5 mm even though they are infected with tubercle bacilli.
 - 3. live virus vaccination.
 - 4. Hodgkin's disease.
 - 5. sarcoidosis.
 - 6. overwhelming miliary or pulmonary tuberculosis.
 - 7. after administration of corticosteroids or immunosuppressive drugs.
- C. Addressing the "booster" phenomenon
 - 1. The tuberculin skin test can be especially valuable when repeated periodically in surveillance of tuberculin-negative persons likely to be exposed to tuberculosis. However, a problem in identifying newly infected persons is the so-called "booster" phenomenon.
 - 2. Repeated testing of uninfected persons does not sensitize them to tuberculin but delayed hypersensitivity to tuberculin, once it has been established

by infection with any species of mycobacteria or by BCG vaccination, may gradually wane over the years in some individuals and the reaction to the skin test may be negative.

3. The stimulus of this skin test may recall the hypersensitivity, which results in an increase in size of the reaction to a subsequent test (a "boosted" response) sometimes causing an apparent conversion interpreted falsely as indicating new infection and may be most frequently encountered in persons over 55.
4. The booster effect can be seen on a second test done as soon as a week after the initial stimulating test and can persist for a year or longer.
5. If skin testing in adults is to be repeated periodically, the initial use of a two-step testing procedure can reduce the likelihood of interpreting a boosted reaction as representing a recent infection.
 - a. if reaction to first test is classified as negative, a second test should be given within a week;
 - b. if reaction to second test is positive, the person should be classified as infected and managed accordingly;
 - c. if second test is negative, the person is classified as uninfected.
6. When testing a person with a history of Bacillus Calmette-Guerin (BCG) Vaccination, a positive tuberculin reaction in BCG vaccinated persons usually indicates infection with *M. tuberculosis* and the person should be evaluated for isoniazid preventive therapy.
7. The Centers for Disease Control has recommended that all persons who test positive for tuberculosis infection should be tested for their human immunodeficiency virus (HIV) status. Similarly, all persons who test seropositive for HIV should be tested for tuberculosis.

4. Mantoux Test Procedure

- A. The Mantoux test is performed by the intradermal injection of 0.1 ml of PPD tuberculin containing 5 TU (tuberculin units) into either the volar or dorsal surface of the forearm. The injection should be made with a disposable tuberculin syringe. The injection should be made just beneath the surface of the skin, with the needle bevel facing upward to produce a discrete, pale elevation of the skin (a wheal) 6 mm to 10 mm in diameter.
- B. To prevent needle stick injuries, needles should not be recapped, purposely bent or broken by hand, removed from disposable syringes, or otherwise manipulated

by hand. After they are used, disposable needles and syringes should be placed in puncture-resistant, properly color-coded or tagged containers for disposal. Gloves are not necessary for this procedure.

C. The Mantoux test should be read 48 to 72 hours after the injection. However, if the patient fails to show up for this scheduled reading, positive reactions may still be measurable up to one week after testing. The reading should be based on measurement of induration, not erythema. The diameter of induration should be measured transversely to the long axis of the forearm and recorded in millimeters.

D. Employee Screening

1. Components of a Complete Screening Program:

- a. Upon employment, each employee who does not have a previously documented positive (≥ 10 mm induration) Mantoux skin test reaction (5 TU PPD) shall be tested. If the reaction is not significant the test should be repeated in 1 to 3 weeks.
- b. If the skin test on a new employee is positive, the new employee will be referred to a physician and be required to obtain an x-ray.
- c. If the new employee's chest x-ray is suggestive of active tuberculosis, the employee will be placed on leave with/without pay until subsequent testing shows that the new employee is not infectious as verified by the employee's personal physician.
- d. If the employee's initial tests upon employment are negative and if positive becomes evident on the next series of test, it will be the responsibility of the institution to absorb the costs of the follow-up x-rays. If the x-ray results indicate additional treatment is required, the Public Health Division will provide the medication and the employee will be referred to their personal physician.
- e. If the x-ray is suggestive of infectious tuberculosis, the employee will be placed on sick/annual leave until subsequent testing shows that the employee is no longer infectious.
- f. Cost of treatment will be borne by the employee, as would any other illness.

2. Periodic repeat skin testing.

a. Guidelines for repeated TB testing are evolving rapidly. The following is mandated for employees in _____:

- (i) Yearly tuberculin skin testing in all _____.
- (ii) More frequent testing of employees may be necessary in high-risk areas such as

respiratory therapy, HIV treatment, etc.

3. Post-exposure examination.

If the employee's most recent skin test was not significant, but the employee subsequently becomes exposed to a known potential transmitter, an immediate retest shall be administered and if not significant (result < 5 mm) then a repeat test shall be administered in 10 to 12 weeks.

5. Work Area Restrictions

In work areas where there is a reasonable likelihood of exposure, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses.

All procedures will be conducted in a manner which will minimize splashing, spraying, splattering, and generation of droplets. Methods, which will be employed at this facility to accomplish this goal, are: *(List methods)*.

6. Specimens

Specimens will be placed in a container, which prevents leakage during the collection, handling, processing, storage, and transport of the specimens.

The container used for this purpose will be labeled or color-coded in accordance with the requirements of the OSHA standard. *(Employers should note that the standard provides for an exemption for specimens from the labeling/color coding requirement of the standard provided that the facility utilizes universal precautions in the handling of all specimens and the containers are recognizable as containing specimens. This exemption applies only while the specimens remain in the facility. If the employer chooses to use this exemption then it should be stated here. _____)*

Any specimens, which could puncture a primary container, will be placed within a secondary container, which is puncture resistant.

If outside contamination of the primary container occurs, the primary container shall be placed within a secondary container, which prevents leakage during the handling, processing, storage, transport, or shipping of the specimen.

7. Contaminated Equipment

_____ *(insert name of position/person)* is responsible for ensuring that

equipment, which has become contaminated, shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible. Equipment not decontaminated shall be tagged/labeled.

8. Personal Protective Equipment (PPE) (NOTE: For AFB isolation, HEPA Mask only)

PPE Provision

_____ (*insert name of position/person*) is responsible for ensuring that the following provisions are met.

All personal protective equipment used at this facility will be provided without cost to employees. Personal protective equipment will be chosen based on the anticipated exposure. (*Indicate how clothing will be provided to employees, e.g. who has responsibility for distribution. You could also list which procedures would require the protective clothing and the recommended type of protection required, this could also be listed as an appendix to this program.*)

PPE Use

_____ (*insert name of position/person*) shall ensure that the employee uses appropriate PPE unless the supervisor shows that employee temporarily and briefly declined to use PPE when under rare and extraordinary circumstances, it was the employee's professional judgment that in the specific instance its use would have prevented the delivery of healthcare or posed an increased hazard to the safety of the worker or co-worker. When the employee makes this judgment, the circumstances shall be investigated and documented in order to determine whether changes can be instituted to prevent such occurrences in the future.

PPE Accessibility

_____ (*insert name of position/person*) shall ensure that appropriate PPE in the appropriate sizes is readily accessible at the work site or is issued without cost to employees. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

PPE Cleaning, Laundering and Disposal

All personal protective equipment will be cleaned, laundered, and disposed of by the employer at no cost to the employees. The employer at no cost will make all repairs and

replacements to employees.

When PPE is removed, it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal.

Respiratory Protection

The Center for Disease Control Guidelines recommend and OSHA requires employees to wear at least a N95 respirator in the following circumstances:

1. When employees enter rooms housing individuals with suspected or confirmed infectious tuberculosis disease.
2. When employees perform high hazard procedures on individuals who have suspected or confirmed tuberculosis disease. Examples of high hazard procedures include:
 - a. aerosolized medication (e.g. pentamidine) treatment
 - b. bronchoscopy
 - c. sputum induction
 - d. endotracheal intubation and suctioning procedures
3. When emergency-medical-response personnel or others must transport, in a closed vehicle, an individual with suspected or confirmed tuberculosis disease.

Respiratory Selection

- a. _____ is disposable and appears to meet current requirements.
2. Fit tests for the disposable respirators will be conducted in accordance with manufacture's instruction.
3. _____ is a half-mask respirator and appears to meet current requirements.
4. A respiratory protection program will be established in accordance with 29 CFR 1910.134 Wyoming's Occupational Health and Safety General Rules.
5. Reuse is permitted as long as the respirator maintains its structural and functional integrity. The facility shall address the circumstances in which a disposable respirator will be considered to be contaminated and not available for reuse.

9. Labels and Signs

When and individual is being maintained in an isolation room because of confirmed or

suspected infectious tuberculosis, a warning shall be posted outside the isolation room.

The appropriate precautionary wording shall be used:

Special Respiratory Isolation

AFB Isolation

Pulmonary Isolation

The sign shall be removed when the individual is no longer maintained in isolation.

10. Record Keeping

A record of employee testing results and treatment shall be maintained and made available to the OSHA compliance officer at the time of inspection.

A record of employee exposure to tuberculosis shall be maintained and made available to the OSHA compliance officer at the time of inspection.