SUBJECT Enforcement Policy and Procedures for Occupational Exposure to Tuberculosis.

Purpose:

To provide uniform inspection procedures and guidelines to be followed when conducting inspections concerning occupational exposure to tuberculosis (TB). Minnesota OSHA directives are intended to provide guidance to OSHA inspectors regarding use of OSHA standards to address Occupational Safety and Health hazards and do not provide guidance for an infection control policy for the purpose of protection of clients/patients.

Scope:

This instruction applies OSHA-wide.

References:

1. “Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings,” 2005, CDC MMWR Vol. 54, No. RR-17, dated December 30, 2005


9. Minnesota Department of Health Tuberculosis Prevention and Control Program

10. CDC Tuberculosis page


Cancellation:

This instruction cancels CPL 2-2.48 CH-2, “Enforcement Policy and Procedures for Occupational Exposure to Tuberculosis,” dated May 21, 2013.

Background:

A total of 9,029 TB cases (a rate of 2.8 cases per 100,000 persons) were reported in the United States in 2018. This is a decrease from the number of cases reported in 2017 and the lowest case count on record in the United States. Minnesota’s rate was above the national average rate in 2018 and the last few years before that. In 2018, 172 new cases of TB were reported in Minnesota. Nationwide, areas of concern include multidrug-resistant strains of TB, TB in immigrant populations and increased risk of TB for patients with HIV. A disproportionately high percentage of TB cases occur among persons incarcerated in U.S. correctional facilities, increasing the risk of transmission to employees.

M. tuberculosis is carried through the air in tiny (i.e., 1 to 5 microns in diameter) infectious particles called droplet nuclei. These droplet nuclei may be generated when a person with pulmonary or laryngeal TB disease coughs, sneezes, shouts, or sings. When inhaled by susceptible persons, the mycobacteria in these droplet nuclei may become established in the lungs and spread throughout the body. Most individuals infected with TB do not show symptoms; however, five to ten percent of those infected, and who are not treated for latent TB infection
(LTBI), will develop TB disease within their lifetimes. Progression from initial infection to clinical illness (i.e., TB disease manifesting signs or symptoms) may occur after an interval of months, or even years, with the risk being highest during the first several years after infection. Transmission of TB is most likely to occur from persons with pulmonary or laryngeal TB who are not on an effective anti-TB therapy and who have not been placed in respiratory isolation.

In healthcare settings where patients with TB receive care, workers exposed to TB droplet nuclei are at increased risk of TB infection. Conducting cough-inducing or aerosol-generating procedures on persons with suspected or confirmed infectious TB disease can further increase the risk of infection in workers.

In 1990, the CDC adopted guidelines for preventing the transmission of TB in healthcare settings. In October of 1994, the CDC revised those guidelines, emphasizing the control of TB through an effective TB infection control program. The guidelines were updated again in December of 2005 to reflect shifts in the incidence and distribution of, and control methods for, TB, and changes in prevailing healthcare practices. See 2005 CDC Guidelines, p. 2.

In 2019, the CDC released updated recommendations regarding screening and testing health care providers for TB.

**Definitions:**

For a complete list of definitions applicable to TB, refer to the list of definitions in the 2005 CDC “Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings,” (MMWR dated December 30, 2005) [See Reference #1 of this Instruction]. Definitions may be found in the Glossary of Definitions.

**ACTION:**

**A. Scheduling of TB-related Inspections.**

1. For purposes of this Instruction, “healthcare setting” is defined as “any setting in which healthcare is delivered and workers might share air space with persons with TB disease or come in contact with clinical TB specimens."

2. In workplaces containing healthcare settings, inspections related to occupational exposure to TB shall be conducted in the following circumstances:
   a. In response to any valid employee complaint regarding TB exposure or in response to any valid referral regarding TB exposure from a government agency or safety and health professional.
   b. In response to TB-related employee fatalities or catastrophes.
   c. As part of all health inspections in facilities where the incidence of TB infection among patients/clients in the relevant facility or healthcare setting is greater than the incidence of TB
among individuals in the most local general population for which the health department has information.

d. Drug Treatment Centers.

3. The following are of healthcare settings that may be inspected in accordance with this Instruction. Various types of healthcare settings might be present in a single facility.

a. Inpatient settings may include: Patient rooms, emergency departments, intensive care units, surgical suites, laboratories, laboratory procedure areas, bronchoscopy suites, sputum induction or inhalation/respiratory therapy rooms, autopsy suites, and embalming rooms.

b. Outpatient settings may include: TB treatment facilities, medical offices, ambulatory-care settings, dialysis units, and dental-care settings.

c. Nontraditional facility-based settings may include: Emergency medical service (EMS) facilities, medical settings in correctional facilities (e.g., prisons, jails, and detention centers), long-term care settings (e.g., hospices and skilled nursing facilities), drug treatment centers, and homeless shelters.

d. Home Healthcare: TB inspections of employers with employees who work in home healthcare settings should be limited to employer program evaluations and off-site employee interviews.

B. Inspection Procedures

This section outlines procedures for conducting inspections and issuing citations for hazards associated with occupational exposure to TB. In addition, OSHIs shall follow the general inspection procedures in the Field Compliance Manual (FCM). OSHIs shall also consult other OSHA directives, appendices, and other references cited in this Instruction for further guidance as needed.

1. All inspections related to occupational exposure to TB should include a review of the employer’s written plans for employee TB protection. Such plans may include a TB infection control program, a respiratory protection plan, and a medical screening program. Employee interviews and site observations are also an integral part of the evaluation process.

2. Healthcare facilities generally have infection control programs (covering both patients and workers) and employee health programs. Management of these functions may be performed by a team or by an individual. Upon entry, the OSHI should request the presence of the infection control director and the occupational health professional responsible for the control of occupational health hazard(s). Other individuals who may be responsible for providing records pertinent to the inspection include: the training director, the facility engineer, and the director of nursing.
3. The OSHI must determine whether the facility has had a suspected or confirmed TB case among patients/clients or employees within the six months prior to the opening conference. This determination may be based, in part, upon interviews and a review of available infection control data. As soon as possible after an inspection has been initiated, the OSHI should contact the appropriate local or state health department to determine whether the facility has reported any TB cases during the previous year. The OSHI shall also review OSHA 300 log entries for confirmed cases of work-related TB. **If the OSHI determines there are no suspected or confirmed TB cases among patients/clients or employees in the facility within the previous six months, he or she should suspend the TB portion of the inspection.**

4. If the facility has had a suspected or confirmed TB case within the previous six months, the OSHI shall proceed with the TB portion of the inspection. The OSHI should verify implementation of the employer's plans for TB protection through employee interviews and direct observations where feasible. Professional judgment should be used to identify which settings in the facility should be inspected during the walkthrough (e.g., patient rooms, emergency departments, radiology departments, intensive care units, surgical suites, laboratories, laboratory procedure areas, bronchoscopy suites, sputum induction or inhalation/respiratory therapy rooms, autopsy suites, and embalming rooms). Compliance will be determined through review of the facility plans for employee TB protection, employee interviews, and an inspection of appropriate areas of the facility.

5. OSHIs who perform smoke-tube testing of ventilation systems in isolation rooms should review the protocol in the 2005 CDC Guidelines (p. 65, Figure 5), and should adhere to the procedures described in Appendix B of this Instruction. Smoke testing should not be conducted in occupied rooms unless it can be determined that there is no potential respiratory impact on the patient. OSHIs must be prepared to present the employer with the safety data sheet (SDS) for the smoke that is released during a smoke-tube test.

6. OSHIs should consult with the Occupational Health Doctor at MN OSHA for technical/medical support as needed, including when accessing and analyzing employee medical records and other health information (see section E5, Access to Employee Exposure and Medical Records, of this Instruction), obtaining a Medical Access Order, and consulting with physicians and other healthcare professionals.

C. OSHI Protection.

1. The OMT Director is responsible for employee training before OSHIs conduct a TB inspection.

2. OSHIs should exercise professional judgment and extreme caution when engaging in activities that may involve potential exposure to TB. An OSHI can assess hazards and the adequacy of his or her planned inspection practices by asking the employer if there are any facility-imposed exposure control requirements that he or she will need to adhere to during the inspection and by interviewing employees. OSHIs must observe all facility-imposed requirements designed to prevent exposure.

3. OSHIs must, at a minimum, wash their hands with soap and water after each inspection related to occupational TB hazards. If handwashing facilities are not immediately available, OSHIs must use hand sanitizers or antiseptic towelettes.
4. Where practical, photographs, or videotaping shall be used for case documentation. Under no circumstances will OSHIs photograph or videotape patients. OSHIs must take all necessary precautions to assure and protect patient confidentiality.

INSPECTION/CITATION GUIDELINES:

A. General.

OSHIs shall follow relevant chapters of the FCM and this Instruction when preparing and issuing citations or notices for violations related to TB. The following requirements may apply to TB hazards found in healthcare settings. Employers must comply with applicable provisions of these requirements when TB hazards are present:

1. MN Rule 182.653(2) - General Duty Clause;
3. 29 CFR 1910.145 – Specifications for Accident Prevention Signs and Tags;
4. 29 CFR 1910.1020 – Access to Employee Exposure and Medical Records;
5. 29 CFR Part 1904 – Recording and Reporting Occupational Injuries and Illnesses;
6. 29 CFR 1910.132 - General Requirements for Personal Protective Equipment;
7. MN Rule 5206 - Right to Know, Infectious Agent.

Violations. If an employer does not comply with the requirements of the OSH Act, MN OSHA Laws & Rules, or applicable OSHA standards, the OMT Director should consider appropriate citations or notices. Although citations are to be classified on a case-by-case basis, the violations described below will often be classified as serious because occupational exposure to TB hazards can result in a substantial probability of death or serious physical harm.

B. General Duty Clause (M. S. § 182.653, subd. 2)

MN Rule 182.653(2) states, “Each employer shall furnish to each of its employees conditions of employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious injury or harm to its employees.”

The 2005 CDC Guidelines and subsequent updates can be used to show industry recognition of the hazards associated with occupational exposure to TB. The Guidelines also contain widely accepted standards of practice employers can follow in carrying out their responsibilities under the OSH Act.

1. Because OSHA’s standards do not completely address the hazards associated with occupational exposure to TB, employers may have obligations under the General Duty Clause to take further measures to protect workers from those hazards. In appropriate cases, the OMT Director, should consider issuing a General Duty citation to an employer that has employees working in healthcare settings who have been exposed to the following, without adequate protection within the prior 6 months:
a. The exhaled air of an individual with suspected or confirmed pulmonary TB disease; or

b. Cough-inducing or aerosol-generating procedures performed on an individual with suspected or confirmed TB disease that have the potential to generate infectious airborne droplet nuclei.

2. When conducting TB-related inspections, OSHIs should evaluate whether the employer has implemented appropriate abatement measures. An employer's failure to implement feasible abatement measures should be considered when evaluating whether to issue a General Duty citation. Deficiencies found in any of the categories identified in topics a-e below, can result in a serious hazard that may be the basis for a General Duty citation.

a. TB Infection Control Program.

b. TB Risk Assessment.

c. Medical Surveillance including Initial Exams and Periodic Evaluations.

d. Case Management of Infected Employees.

e. Engineering Controls.

3. General Duty Citations shall be issued in accordance with the applicable provisions of the FCM and this Instruction. All abatement methods identified as potential means of correcting a given hazard should be listed in a single citation or notice.

4. For purposes of citing General Duty, recognition of the hazard associated with the types of exposures discussed in this Instruction may be shown by referring to the 2005 CDC Guidelines and subsequent updates; the CDC is an acknowledged body of experts familiar with these hazards. The 2005 CDC Guidelines and subsequent updates should be consulted both for evidence of hazard recognition and for assistance identifying feasible methods of abatement.

5. If issuing a TB-related citation under General Duty, the Alleged Violation Description (AVD), after identifying the Standard Alleged Violation Element (SAVE), should state:

a. “On or about [date], the employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm in that employees were exposed to the hazard of being infected with *M. tuberculosis* through insufficiently protected contact with [specify group such as patients, inmates, residents, clients, etc.] who was/were infectious or suspected to be infectious with tuberculosis because: [describe relevant circumstances].”

b. “Feasible and useful abatement methods for reducing this hazard include but are not limited to: [list abatement methods].”
NOTE: Refer to the 2005 CDC Guidelines, Appendix A, for a summary of recommended administrative, environmental, and respiratory protection controls for selected healthcare settings.

6. Hazard Alert Letters. In circumstances in which the OMT Director determines that citations under the General Duty Clause are not supported by the requisite evidence, he or she should consider issuing Hazard Alert Letters, in appropriate cases, to notify employers about the dangers of occupational exposure to TB and to provide information about methods that may be used to protect workers from those hazards. A sample Hazard Alert Letter may be found at Appendix D of this Instruction.

a. **Worker Education and Training.** Training and information to ensure employee knowledge of such issues as the mode of TB transmission, its signs and symptoms, medical surveillance and therapy, and site specific protocols including the purpose and proper use of controls shall be provided to all current employees and to new workers upon hiring.

Workers shall be trained to recognize, and report to a designated person, any patients or clients with symptoms suggestive of infectious TB and instructed on the post exposure protocols to be followed in the event of an exposure incident.

Training on TB can be part of the employer’s Employee Right-to-Know program and must be updated annually.

C. **Minnesota Rules Chapter 5206 - Employee Right-to-Know**

TB is an infectious agent and employers are required to train employees about TB under Right to Know training initially before potential exposure and annually. Cite Right to Know training if not in compliance.


D. **1910.134 - Respiratory Protection**

Paragraph (a)(2) of OSHA’s Respiratory Protection Standard states: “A respirator shall be provided to each employee when such equipment is necessary to protect the health of such employee. The employer shall provide the respirators which are applicable and suitable for the purpose intended. The employer shall be responsible for the establishment and maintenance of a respiratory protection program, which shall include the requirements outlined in” 29 CFR 1910.134(c).

1. Requirements for an Acceptable Respirator Program.
The 2005 CDC Guidelines specify standard performance criteria for respiratory protection against exposure to TB. Under the 2005 CDC Guidelines, non-powered, air-purifying particulate-filter respirators with N95, N99, N100, R95, R99, R100, P95, P99, or P100 filters (including filtering facepieces (dust masks)), powered air-purifying respirators (PAPRs) with HEPA filters, or positive-pressure airline (supplied air) respirators may be used for protection against airborne M. tuberculosis. See 2005 CDC Guidelines, pp. 75-76.

The CDC recommends that employees wear, at a minimum, a NIOSH approved N95 filtering facepiece respirator (non-powered, air-purifying half facepiece) when respiratory protection is needed due to TB hazards (2005 CDC Guidelines, pp. 39-40). Such circumstances may include:

a. When employees enter rooms housing individuals with suspected or confirmed infectious TB disease;

b. When emergency medical response personnel or other workers transport, in a closed vehicle, an individual with suspected or confirmed infectious TB disease; and

c. When employees are present during the performance of cough-inducing or aerosol-generating procedures (e.g., bronchoscopy, sputum induction, autopsy, and selected laboratory procedures) on individuals who have suspected or confirmed infectious TB disease. See 2005 CDC Guidelines, pp. 38-39.

NOTE: The risk assessment for a particular setting might identify circumstances for which a higher level of respiratory protection (e.g., PAPRs) is necessary to provide adequate protection.

2. Citation Guidance for Respiratory Protection

a. When respiratory protection is required, the employer must establish and maintain a respiratory protection program in accordance with 29 CFR 1910.134(c). A citation based on an employer’s failure to implement components of a respiratory protection program should be issued under the appropriate paragraph(s) of 29 CFR 1910.134. See CPL 2-2.120, Respiratory Protection Enforcement Procedures.

NOTE: If a facility chooses to use disposable N95 respirators as part of its respiratory protection program, each respirator can be reused by the same worker as long it maintains its structural and functional integrity and the filter material is not physically damaged or soiled. Disposable respirators must be stored in accord with 29 CFR 1910.134(h)(2) between uses. The facility’s infection control procedures should establish polices for identifying when a disposable respirator will be deemed contaminated and unsuitable for reuse.

b. A citation based on an employer’s failure to provide respirators necessary to protect employees from TB hazards should be issued under 29 CFR 1910.134(a)(1) or (a)(2), as appropriate.
c. A citation based on an employer’s failure to identify and evaluate TB-related respiratory hazards in the workplace should be issued under 29 CFR 1910.134(d)(1)(iii).

NOTE: The respiratory hazard evaluation requirement is performance-oriented, and a variety of methods may be used to identify and evaluate potential employee exposures. Employers, however, are expected to take into account all relevant information relating to potential respiratory hazards.

d. A citation based on an employer’s failure to ensure that employees using any negative or positive pressure tight-fitting facepiece pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT) should be issued under the appropriate paragraph of 29 CFR 1910.134(f).


"On or about [date], the employer did not provide suitable respirators when necessary to protect employee health: Employees engaging in [describe task] were [not provided with respirators for protection against airborne tuberculosis] or [were provided only with (describe surgical mask or other protection used) for protection against airborne tuberculosis]. At a minimum, an N95 NIOSH-certified filtering facepiece respirator is necessary to protect employees from airborne TB."

E. 1910.132 - PPE

This section provides guidance to help OSHIs evaluate employers’ compliance with OSHA’s PPE standards. A citation based on an employer’s failure to provide or ensure the use of PPE should be issued under the appropriate provision of the PPE standards for the particular hazard addressed. See STD 1-6.6, Personal Protective Equipment Used in General Industry.

1. A citation based on an employer’s failure to conduct a hazard assessment to determine the need for PPE (such as faceshields, goggles, or safety glasses with side shields to protect an employee from splashes and droplet sprays) should be issued under 29 CFR 1910.132(d)(1).

2. A citation based on an employer’s failure to provide or ensure the use of PPE necessary to protect against splashes and droplet sprays of infectious material should be issued under 29 CFR 1910.132(d)(1)(i).

3. A citation based on an employer’s failure to provide training to each employee required to use PPE should be issued under 29 CFR 1910.132(f)(1).

F. 1910.145 - Accident Prevention Signs and Tags
1. A citation based on an employer’s failure to post a biological hazard tag outside rooms where there is potential for TB exposure should be issued under 29 CFR 1910.145(f)(8)(i).

2. A citation based on an employer’s failure to utilize hazard warning tags with a proper signal word (i.e., “Danger,” “Caution,” “Biological Hazard,” or “BIOHAZARD”) or the biological hazard symbol should be issued under 29 CFR 1910.145(f)(4)(i)(A).

3. A citation based on an employer’s failure to provide a major message on the biological hazard tag that indicates the specific hazardous condition or the instruction to be communicated to employees should be issued under 29 CFR 1910.145(f)(4)(i)(B).

4. A citation based on an employer’s failure to inform employees about the meaning of a biological hazard tag, and the precautions they need to take when they see such a tag, should be issued under 29 CFR 1910.145(f)(4)(v).

5. A citation based on an employer’s failure to utilize biological hazard tags on air transport components (e.g., fans, ducts, filters) to identify TB hazards to employees working on the equipment should be issued under 29 CFR 1910.145(f)(8)(i).

6. Sample AVD language for failure to post a biological warning tag:

   On or about [date], a warning tag identifying actual or potential exposure to M. tuberculosis was not posted [describe location].

G. 1910.1020 - Access to Employee Exposure and Medical Records

1. A record documenting employee exposure to TB is an employee exposure record within the meaning of 29 CFR 1910.1020(c)(5). Where known, an employee exposure record should contain a notation of the type of TB to which the employee was exposed (e.g., multi-drug resistant TB).

2. Records of TB skin test results and medical evaluations and treatment are employee medical records for purposes of 29 CFR 1910.1020.


H. Part 1904.11 – Recording Criteria for Work-related Tuberculosis Cases

   See CPL 2-0.135, Recordkeeping Policies and Procedures.
1. Under 29 CFR 1904.11(a), for OSHA recordkeeping purposes, covered employers must record TB cases when an employee has been occupationally exposed to anyone with a known case of active TB and the employee subsequently develops TB infection evidenced by a positive skin test or diagnosed by a physician or other licensed health care professional. The case must be recorded by checking the “respiratory condition” column on the OSHA 300 Log. However, the case need not be recorded (or can be erased) if: (1) the worker lives in a household with a person diagnosed with active TB; (2) the Public Health Department identified the worker as a contact of a person with active TB (where contact is unrelated to the workplace); or (3) a medical investigation shows that the employee’s infection was caused by exposure away from work or that the case was not related to the workplace TB exposure. See 29 CFR 1904.11(b)(2).

2. If a case of LTBI entered on the OSHA 300 log progresses to active TB disease during the 5-year record retention period, the original entry for the infection on the OSHA log must be updated to reflect the new employee information. See 29 CFR 1904.33(b)(1). Although in such cases it may be difficult to determine if TB disease resulted from the source indicated by the skin test conversion or from subsequent exposures, only one case should be entered on the OSHA 300 log to avoid double counting.

**RECORDING IN MOOSE**

A TB-related inspection is any inspection conducted to investigate the presence or alleged presence of TB disease (i.e., a referral or complaint inspection).

When a TB-related inspection is conducted, enter the inspection in MOOSE as for any inspection and enter the code “N 02 TB” under Optional Information.

James Krueger, Director MNOSHA Compliance
For the MNOSHA Management Team

Distribution: OSHA Compliance and WSC Director

Attachments: Appendix A -- TB Inspection Checklist

NOTICE: Minnesota OSHA Directives are used exclusively by MNOSHA personnel to assist in the administration of the OSHA program and in the proper interpretation and application of occupational safety and health statutes, regulations, and standards. They are not legally binding declarations and they are subject to revision or deletion at any time without notice.
APPENDIX A

MNOSHA TB INSPECTION CHECKLIST  Specific Questions to Address

I. ASSIGNMENT OF RESPONSIBILITY

☐ Does the facility have a qualified person(s) assigned to oversee the infection control program and training of employees?

II. RISK ASSESSMENT

Facility TB Risk Assessment Worksheet from MDH:
https://www.health.state.mn.us/diseases/tb/rules/riskwksht.docx

☐ Has the facility conducted a risk assessment to evaluate the risk of transmission of TB?

☐ What level(s) of risk have been classified for the facility or groups/areas of the facility?

Medium, low, or ongoing risk level (or minimal/ nonminimal risk for correctional facilities)?

For inpatient settings with 200 beds or more, if 6 or more TB clients have been seen in the past year, it is classified as medium risk. If less than six clients have been seen in the setting the last year, then the classification is low risk.

For inpatient settings with less than 200 beds and for outpatient and non-traditional facilities, it is classified as medium risk if three or more TB clients have been seen in the past year. If less than three clients, then the classification is low risk.

If there is evidence of person to person transmission at any facility, then the risk category would be “Potential Ongoing Transmission” and frequent testing as often as every 8-10 weeks until lapses in infection control have been corrected may need to be done. The setting should then be considered a medium risk setting for at least one year.

☐ Has the facility treated suspect/active cases of TB?

If yes, the # of suspect cases within the last 6 months; last 12 months.
If yes, the # of active cases within the last 6 months; 12 months.

☐ # of TB cases identified but not admitted in the facility -- in the last 6 months; last 12 months

☐ Has the facility treated cases of multi-drug resistant TB?

If yes, # of cases currently and within the last 6 months.

III. EXPOSURE CONTROL PLAN

☐ Does the facility have a written exposure control plan that meets the requirements of 29 CFR 1910.1030 (Bloodborne Pathogens) that covers TB?

☐ Has TB been included in the employer’s Right-to-Know training?
When was the last training conducted?  
What departments have been included in the training?

☐ Does the facility have a written protocol for early identification (screening) of individuals for suspect or active cases of TB upon entering the facility?  
   If yes, in what areas is this protocol conducted?

☐ Does the facility treat suspect/active cases of TB?  
   If yes, is there a written protocol addressing actions to be taken upon identification?

☐ If the facility does not perform high hazard procedures or does not have the engineering controls needed to accept suspect/active cases of TB, is there a written protocol outlining action to be taken by the employer/employee?

IV. OSHA 300 LOG RECORDKEEPING

☐ Have there been any employees with a skin test conversion (i.e. change from baseline negative to a later positive) or a positive blood test after initial screening?  
   If yes, document the # of employees.  
   Have the positive test conversions been documented on the OSHA 300 log?

☐ Have any employees been put on a workplace restriction from having active TB?

V. HEALTH CARE PERSONNEL TB TESTING (updated with CDC 2019 recommendations)

☐ Does the facility have designated, trained personnel administering, reading and interpreting the TB testing offered to employees?

☐ Has TB testing/treatment been offered to employees at the following intervals:

* Initial Hire (immediately upon hire)–TB screening of all Health Care Personnel, including a symptom evaluation and test (IGRA or TST) for those without documented prior TB disease or LTBI; individual TB risk assessment.

*Serial screening and Testing for Health Care Personnel without LTBI- Not routinely recommended; can consider for selected HCP groups; recommend annual TB education for all Health Care Personnel, including information about TB exposure risks for all Health Care Personnel.

*Evaluation and Treatment of Positive Test Results- Treatment is encouraged for all Health Care Personnel with untreated LTBI, unless medically contraindicated.

Abbreviations:  IGRA = interferon-gamma release assay;  LTBI = latent tuberculosis infection;  TST = tuberculin skin test.

VI. ENGINEERING CONTROLS NECESSARY FOR TREATING SUSPECT/ACTIVE CASES

☐ Upon identifying a suspect/active case of TB, are there negative pressure isolation rooms available?
If yes, where and how many?

☐ Are there local exhaust devices (booths, tents, hoods) having negative pressure used for high hazard procedures?
  If yes, where and how many?

☐ Is there periodic verification of negative pressure maintenance? (e.g., smoke trail testing)
  If yes, what type of verification and how often?

☐ Is the ventilation from the negative pressure room/device recirculated through HEPA filters or exhausted directly outside?

☐ Are isolation rooms being occupied by TB cases identified following 1910.145 to provide message of necessary precautions?

☐ Are air systems transporting contaminated air labeled to inform employees working on the system of TB-related hazards?

VII. RESPIRATORY PROTECTION

☐ Where in the facility is respiratory protection being worn by employees?

☐ Type of respiratory protection worn by employees:

☐ Has respirator program been fully implemented?

VIII. POST EXPOSURE MANAGEMENT

☐ Is symptom evaluation conducted for all Health Care Personnel when an exposure is recognized? For Health Care Personnel with a baseline negative TB test and no prior TB disease or LTBI, perform a test (IGRA or TST) when the exposure is identified. If that test is negative, do another test 8–10 weeks after the last exposure.

☐ Are immunosuppressed workers removed from all possible contact with individuals possibly infected with TB?

☐ Have there been any exposure incidents (i.e. incidents where employees were directly exposed to an active case of TB without the use of engineering controls or respiratory protection)?

  # of skin tests or blood tests given following the exposure incident
  # of skin test conversions/positive blood tests following the exposure incident

  # of employees developing disease after the exposure incident.