# ANNUAL TB RISK ASSESSMENT FMIC-014

**Name of Hospital: __MANGUM REGIONAL MEDICAL CENTER**

**TB Risk Assessment for Calendar Year: 2023**

**Completed By: Meghan Smith RN, IC**

## Appendix B. Tuberculosis (TB) risk assessment worksheet

This model worksheet should be considered for use in performing TB risk assessments for health-care facilities and nontraditional facility-based settings. Facilities with more than one type of setting will need to apply this table to each setting.

| **Scoring √ or Y = Yes** | **X or N = No** | **NA = Not Applicable** |
|---|---|---|

### 1. Incidence of TB

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|---|---|
| What is the incidence of TB in your community (county or region served by the health-care setting), and how does it compare with the state and national average? What is the incidence of TB in your facility and specific settings and how do those rates compare? (Incidence is the number of TB cases in your community the previous year. A rate of TB cases per 100,000 persons should be obtained for comparison.)* This information can be obtained from the state or local health department. | Community rate: **18.0**<br>State rate: **1.6**<br>National rate: **2.9**<br>Facility rate**: 0.0**<br>Department 1 rate **0.0**<br>Department 2 rate **0.0**<br>Department 3 rate **0.0** |
| Are patients with suspected or confirmed TB disease encountered in your setting (inpatient and outpatient)? | **No** |
| If yes, how many patients with suspected and confirmed TB disease are treated in your health-care setting in 1 year (inpatient and outpatient)? Review laboratory data, infection-control records, and databases containing discharge diagnoses. | **Year** **No. patients** **Suspected Confirmed**<br>1 year ago **0** **0**<br>2 years ago **0** **0**<br>5 years ago **0** **0** |
| If no, does your health-care setting have a plan for the triage of patients with suspected or confirmed TB disease? | **Yes** |
| Currently, does your health-care setting have a cluster of persons with confirmed TB disease that might be a result of ongoing transmission of *Mycobacterium tuberculosis* within your setting (inpatient and outpatient)? | **No** |

### 2. Risk Classification

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|---|---|
| **Inpatient settings** | |
| How many inpatient beds are in your inpatient setting? | **18** |
| How many patients with TB disease are encountered in the inpatient setting in 1 year? Review laboratory data, infection-control records, and databases containing discharge diagnoses. | **Previous year: 0**<br>**5 years ago: 0** |
| Depending on the number of beds and TB patients encountered in 1 year, what is the risk classification for your inpatient setting? (See Appendix C.) | **Low risk** |
| Does your health-care setting have a plan for the triage of patients with suspected or confirmed TB disease? | **Yes** |
| **Outpatient settings** | |
| How many TB patients are evaluated at your outpatient setting in 1 year? Review laboratory data, infection-control records, and databases containing discharge diagnoses. | **Previous year: 0**<br>**5 years ago: 0** |
| Is your health-care setting a TB clinic?<br>(If yes, a classification of at least medium risk is recommended.) | **No** |

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| Does evidence exist that a high incidence of TB disease has been observed in the community that the health-care setting serves? | **No** |
| Does evidence exist of person-to-person transmission of *M. tuberculosis* in the health-care setting? (Use information from case reports. Determine if any tuberculin skin test [TST] or blood assay for *M. tuberculosis* [BAMT] conversions have occurred among health-care workers [HCWs]). | **No** |
| Does evidence exist that ongoing or unresolved health-care–associated transmission has occurred in the health-care setting (based on case reports)? | **No** |
| Is there a high incidence of immunocompromised patients or HCWs in the health-care setting? | **No** |
| Have patients with drug-resistant TB disease been encountered in your health-care setting within the previous 5 years? | **No** |
| When was the first time a risk classification was done for your health-care setting? | **March 2021** |
| Considering the items above, would your health-care setting need a higher risk classification? | **No** |
| Depending on the number of TB patients evaluated in 1 year, what is the risk classification for your outpatient setting? (See Appendix C) | **Low risk** |
| Does your health-care setting have a plan for the triage of patients with suspected or confirmed TB disease? | **Yes** |
| **Nontraditional facility-based settings – N/A** | |
| How many TB patients are encountered at your setting in 1 year? | Previous year<br>5 years ago |
| Does evidence exist that a high incidence of TB disease has been observed in the community that the setting serves? | Yes No |
| Does evidence exist of person-to-person transmission of *M. tuberculosis* in the setting? | Yes No |
| Have any recent TST or BAMT conversions occurred among staff or clients? | Yes No |
| Is there a high incidence of immunocompromised patients or HCWs in the setting? | Yes No |
| Have patients with drug-resistant TB disease been encountered in your health-care setting within the previous 5 years? | Yes No<br>Yes |
| When was the first time a risk classification was done for your setting? | |
| Considering the items above, would your setting require a higher risk classification? | Yes No |
| Does your setting have a plan for the triage of patients with suspected or confirmed TB disease? | Yes No |
| Depending on the number of patients with TB disease who are encountered in a nontraditional setting in 1 year, what is the risk classification for your setting? (See Appendix C) | o Low risk<br>o Medium risk<br>o Potential ongoing transmission |

**3. Screening of HCWs for *M. tuberculosis* Infection**

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| Does the health-care setting have a TB screening program for HCWs? | **Yes** |
| If yes, which HCWs are included in the TB screening program? (Check all that apply.)<br>o **Physicians** | o **Janitorial staff**<br>**o Maintenance or engineering staff**<br>**o Dietary staff**<br>**o Receptionists** |

| | |
|---|---|
| **o Mid-level practitioners (nurse practitioners [NP] and physician's assistants [PA])**<br>**o Nurses**<br>**o Administrators**<br>**o Laboratory workers**<br>**o Respiratory therapists**<br>**o Physical therapists**<br>**o Contract staff** | |
| Is baseline skin testing performed with two-step TST for HCWs? | **Yes** |
| Is baseline testing performed with QFT or other BAMT for HCWs? | **No** |
| How frequently are HCWs tested for *M. tuberculosis* infection? | **Upon hire and at exposure** |
| Are the *M. tuberculosis* infection test records maintained for HCWs? | **Yes** |
| Where are the *M. tuberculosis* infection test records for HCWs maintained? Who maintains the records? | **1. IP Office; in a locked cabinet in a locked room.**<br>**2. IP RN** |
| If the setting has a serial TB screening program for HCWs to test for *M. tuberculosis* infection, what are the conversion rates for the previous years? †<br>**1 year ago: 0** **4 years ago: Data unobtainable**<br>**2 years ago: 0** **5 years ago: Data unobtainable**<br>**3 years ago: 0** | |
| Has the test conversion rate for *M. tuberculosis* infection been increasing or decreasing, or has it remained the same over the previous 5 years? (check one) | **No change** |
| Do any areas of the health-care setting (e.g., waiting rooms or clinics) or any group of HCWs (e.g., lab workers, emergency department staff, respiratory therapists, and HCWs who attend bronchoscopies) have a test conversion rate for *M. tuberculosis* infection that exceeds the health-care setting's annual average? | **No** |
| For HCWs who have positive test results for *M. tuberculosis* infection and who leave employment at the health setting, are efforts made to communicate test results and recommend follow-up of latent TB infection (LTBI) treatment with the local health department or their primary physician? | **Yes** |

**4. TB Infection-Control Program**

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| Does the health-care setting have a written TB infection-control plan? | **Yes** |
| Who is responsible for the infection-control program? | **Infection Preventionist** |
| When was the TB infection-control plan first written? | **May 2021** |
| When was the TB infection-control plan last reviewed or updated? | **March 2023** |
| Does the written infection-control plan need to be updated based on the timing of the previous update (i.e., >1 year, changing TB epidemiology of the community or setting, the occurrence of a TB outbreak, change in state or local TB policy, or other factors related to a change in risk for transmission of *M. tuberculosis*)? | **Yes** |
| Does the health-care setting have an infection-control committee (or another committee with infection control responsibilities)? | **Yes** |
| If yes, which groups are represented on the infection-control committee? (Check all that apply.)<br>**o Physicians** **o Laboratory personnel**<br>**o Administrator** | |

| | |
|---|---|
| o **Nurses**<br>o **Pharmacists** | o **Quality/Risk control (QC)**<br>o **Others: Dietary, EVS, Plant-ops, Respiratory Therapists, Radiology techs** |
| If no, what committee is responsible for infection control in the setting? | **N/A** |

**5. Implementation of TB Infection-Control Plan Based on Review by Infection-Control Committee**

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| Has a person been designated to be responsible for implementing an infection-control plan in your health-care setting? If yes, list the name: | **Meghan Smith RN, IC** |
| Based on a review of the medical records, what is the average number of days for the following: **No TB patients available to review.**<br>• Presentation of patient until collection of specimen<br>• Specimen collection until receipt by laboratory<br>• Receipt of specimen by laboratory until smear results are provided to health-care provider _____<br>• Diagnosis until initiation of standard antituberculosis treatment<br>• Receipt of specimen by laboratory until culture results are provided to health-care provider _____<br>• Receipt of specimen by laboratory until drug-susceptibility results are provided to health-care provider<br>• Receipt of drug-susceptibility results until adjustment of antituberculosis treatment, if indicated<br>• Admission of patient to hospital until placement in airborne infection isolation (AII) _____ | |
| Through what means (e.g., review of TST or BAMT conversion rates, patient medical records, and time analysis) are lapses in infection control recognized? | **Review of medical records, monitoring lab and culture results** |
| What mechanisms are in place to correct lapses in infection control? | **Just-in-time education, procedure review and adjustments if needed.** |
| Based on measurement in routine QC exercises, is the infection-control plan being properly implemented? | **Yes** |
| Is ongoing training and education regarding TB infection-control practices provided for HCWs? | **Yes** |

**6. Laboratory Processing of TB-Related Specimens, Tests, and Results Based on Laboratory Review**

| Which of the following tests are either conducted in-house at your health-care setting's laboratory or sent out to a reference laboratory? | In-house | Sent out |
|---|---|---|
| Acid-fast bacilli (AFB) smears | | **x** |
| Culture using liquid media (e.g., Bactec and MB-BacT) | | **x** |
| Culture using solid media | | **x** |
| Drug-susceptibility testing | | **x** |
| Nucleic acid amplification (NAA) testing | | **x** |

What is the usual transport time for specimens to reach the laboratory for the following tests?

| | |
|---|---|
| AFB smears | **< 24 hrs** |
| Culture using liquid media (e.g., Bactec, MB-BacT) | **< 24 hrs** |
| Culture using solid media | **< 24 hrs** |
| Drug-susceptibility testing | **< 24 hrs** |
| Other (specify) | **N/A** |
| NAA testing | **< 24 hrs** |

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| Does the laboratory at your health-care setting or the reference laboratory used by your health-care setting report AFB smear results for all patients within 24 hours of receipt of specimen? What is the procedure for weekends? | **No**<br>**Same as during weekdays; no changes for weekends.** |

**7. Environmental Controls**

Which environmental controls are in place in your health-care setting? (Check all that apply and describe)

| Environmental control | Description |
|---|---|
| **x AII rooms** | **Rm 13** |
| o Local exhaust ventilation (enclosing devices and exterior devices) | **N/A** |
| o General ventilation (e.g., **single-pass system**, recirculation system.) | **Single Pass** |
| o Air-cleaning methods (e.g., high-efficiency particulate air [HEPA] filtration and ultraviolet germicidal irradiation [UVGI]) | **N/A** |

What are the actual air changes per hour (ACH) and design for various rooms in the setting?

**Room: 13** **ACH: 14.20** **Design: Negative Pressure/ Single-pass ventilation**

Which of the following local exterior or enclosing devices such as exhaust ventilation devices are used in your health-care setting? (Check all that apply) **N/A**
o Laboratory hoods
o Booths for sputum induction
o Tents or hoods for enclosing patient or procedure

What general ventilation systems are used in your health-care setting? (Check all that apply)
**x Single-pass system**
o Variable air volume (VAV)
o Constant air volume (CAV)
o Recirculation system
o Other_____

What air-cleaning methods are used in your health-care setting? (Check all that apply)
HEPA filtration
o Fixed room-air recirculation systems
o Portable room-air recirculation systems
UVGI
o Duct irradiation
o Upper-air irradiation
o Portable room-air cleaners

| | |
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| How many AII rooms are in the health-care setting? | **1 AII (2 additional negative-pressure rooms: OR 2 and Room 12 with single-pass ventilation system)** |

What ventilation methods are used for AII rooms? (Check all that apply)
Primary (general ventilation):
**x Single-pass heating, ventilating, and air conditioning (HVAC)**
o Recirculating HVAC systems

Secondary (methods to increase equivalent ACH): **N/A**
o Fixed room recirculating units
o HEPA filtration
o UVGI
o Other (specify) _____

| | |
|---|---|
| Does your health-care setting employ, have access to, or collaborate with an environmental engineer (e.g., professional engineer) or other professional with appropriate expertise (e.g., certified industrial hygienist) for consultation on design specifications, installation, maintenance, and evaluation of environmental controls? | **No** |
| Are environmental controls regularly checked and maintained with results recorded in maintenance logs? | **Yes** |
| Are AII rooms checked daily for negative pressure when in use? | **Yes** |

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| Is the directional airflow in AII rooms checked daily when in use with smoke tubes or visual checks? | **Yes** |
| Are these results readily available? | **Yes** |
| What procedures are in place if the AII room pressure is not negative? | **Per Plant Ops Director to evaluate and develop plan of action.** |
| Do AII rooms meet the recommended pressure differential of 0.01-inch water column negative to surrounding structures? | **Yes** |

**8. Respiratory-Protection Program**

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|---|---|
| Does your health-care setting have a written respiratory-protection program? | **Yes** |
| Which HCWs are included in the respiratory protection program? (Check all that apply)<br>o **Physicians**<br>o **Mid-level practitioners (NPs and PAs)**<br>o **Nurses**<br>o **Administrators**<br>o **Laboratory personnel**<br>o **Contract staff**<br>o **Janitorial staff**<br>o **Maintenance or engineering staff**<br>o **Dietary staff**<br>o **Ancillary staff (e.g., office staff,** | |
| Are respirators used in this setting for HCWs working with TB patients? If yes, include manufacturer, model, and specific application (e.g., ABC model 1234 for bronchoscopy and DEF model 5678 for routine contact with infectious TB patients).<br>Manufacturer / Model / Specific application<br>**3M** / **Aura 1870+** / **Routine Contact**<br>**3M** / **8210 +** / **Routine Contact** | |
| Is annual respiratory-protection training for HCWs performed by a person with advanced training in respiratory protection? | **Yes** |
| Does your health-care setting provide initial fit testing for HCWs?<br>If yes, when is it conducted _____ | **Yes**<br>**Upon Hire** |
| Does your health-care setting provide periodic fit testing for HCWs?<br>If yes, when and how frequently is it conducted? _____ | **Yes**<br>**Annually** |
| What method of fit testing is used? **Qualified fit testing by trained and qualified personnel** | |
| Is qualitative fit testing used? | **Yes** |
| Is quantitative fit testing used? | **No** |

**9. Reassessment of TB risk**

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|---|---|
| How frequently is the TB risk assessment conducted or updated in the health-care setting? | **Annually or as needed** |
| When was the last TB risk assessment conducted? | **March 2023** |
| What problems were identified during the previous TB risk assessment? **N/A**<br>1) _____<br>2) _____<br>3) _____<br>4) _____<br>5) _____ | |
| What actions were taken to address the problems identified during the previous TB risk assessment? **N/A** | |

| | |
|---|---|
| 1) _____<br>_____<br>2) _____<br>_____<br>3) _____<br>_____<br>4) _____<br>_____<br>5) _____<br>_____ | |
| Did the risk classification need to be revised as a result of the last TB risk assessment? | **NO** |

* If the population served by the health-care facility is not representative of the community in which the facility is located, an alternate comparison population might be appropriate.

† Test conversion rate is calculated by dividing the number of conversions among HCWs by the number of HCWs who were tested and had prior negative results during a certain period (see Supplement, Surveillance and Detection of *M. tuberculosis* infections in Health-Care Settings).