

ANNUAL TB RISK ASSESSMENT

Name of Hospital: Mangum Regional Medical CenterTB Risk Assessment for Calendar Year: 2020Completed By: Sarah Cox, BSN, LP**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

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 <u>0.0</u> State rate <u>1.9</u> National rate <u>2.7</u> Facility rate <u>0.0</u> Department 1 rate <u>N/A</u> Department 2 rate <u>N/A</u> Department 3 rate <u>N/A</u>
Are patients with suspected or confirmed TB disease encountered in your setting (inpatient and outpatient)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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 1 year ago <u>0</u> <u>0</u> 2 years ago <u>0</u> <u>0</u> 5 years ago <u>0</u> <u>0</u>
If no, does your health-care setting have a plan for the triage of patients with suspected or confirmed TB disease?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Currently, does your health-care setting have a cluster of persons with confirmed TB disease that might be a result of ongoing transmission of <i>Mycobacterium tuberculosis</i> within your setting (inpatient and outpatient)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

2. Risk Classification

Inpatient settings	
How many inpatient beds are in your inpatient setting?	<u>18</u>
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 <u>0</u> 5 years ago <u>0</u>
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.)	<input checked="" type="checkbox"/> Low risk <input type="checkbox"/> Medium risk <input type="checkbox"/> Potential ongoing transmission
Does your health-care setting have a plan for the triage of patients with suspected or confirmed TB disease?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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 <u>0</u> 5 years ago <u>0</u>

Is your health-care setting a TB clinic? (If yes, a classification of at least medium risk is recommended.)	Yes <input checked="" type="radio"/> No <input type="radio"/>
Does evidence exist that a high incidence of TB disease has been observed in the community that the health-care setting serves?	Yes <input checked="" type="radio"/> No <input type="radio"/>
Does evidence exist of person-to-person transmission of <i>M. tuberculosis</i> in the health-care setting? (Use information from case reports. Determine if any tuberculin skin test [TST] or blood assay for <i>M. tuberculosis</i> [BAMT] conversions have occurred among health-care workers [HCWs].)	Yes <input checked="" type="radio"/> No <input type="radio"/>
Does evidence exist that ongoing or unresolved health-care-associated transmission has occurred in the health-care setting (based on case reports)?	Yes <input checked="" type="radio"/> No <input type="radio"/>
Is there a high incidence of immunocompromised patients or HCWs in the health-care setting?	Yes <input checked="" type="radio"/> No <input type="radio"/>
Have patients with drug-resistant TB disease been encountered in your health-care setting within the previous 5 years?	Yes <input checked="" type="radio"/> No <input type="radio"/> Year _____
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?	Yes <input checked="" type="radio"/> No <input type="radio"/>
Depending on the number of TB patients evaluated in 1 year, what is the risk classification for your outpatient setting? (See Appendix C)	<input checked="" type="radio"/> Low risk <input type="radio"/> Medium risk <input type="radio"/> Potential ongoing transmission
Does your health-care setting have a plan for the triage of patients with suspected or confirmed TB disease?	Yes <input type="radio"/> No <input checked="" type="radio"/>
Nontraditional facility-based settings N/A	
How many TB patients are encountered at your setting in 1 year?	Previous year _____ 5 years ago _____
Does evidence exist that a high incidence of TB disease has been observed in the community that the setting serves?	Yes <input type="radio"/> No <input checked="" type="radio"/>
Does evidence exist of person-to-person transmission of <i>M. tuberculosis</i> in the setting?	Yes <input type="radio"/> No <input checked="" type="radio"/>
Have any recent TST or BAMT conversions occurred among staff or clients?	Yes <input type="radio"/> No <input checked="" type="radio"/>
Is there a high incidence of immunocompromised patients or HCWs in the setting?	Yes <input type="radio"/> No <input checked="" type="radio"/>
Have patients with drug-resistant TB disease been encountered in your health-care setting within the previous 5 years?	Yes <input type="radio"/> No <input checked="" type="radio"/> Year _____
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 <input type="radio"/> No <input checked="" type="radio"/>
Does your setting have a plan for the triage of patients with suspected or confirmed TB disease?	Yes <input type="radio"/> No <input checked="" type="radio"/>
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)	<input type="radio"/> Low risk <input type="radio"/> Medium risk <input checked="" type="radio"/> Potential ongoing transmission

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

Does the health-care setting have a TB screening program for HCWs?	Yes <input checked="" type="radio"/> No <input type="radio"/>
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If yes, which HCWs are included in the TB screening program? (Check all that apply.)	
<input checked="" type="checkbox"/> Physicians <input checked="" type="checkbox"/> Mid-level practitioners (nurse practitioners [NP] and physician's assistants [PA]) <input checked="" type="checkbox"/> Nurses <input checked="" type="checkbox"/> Administrators <input checked="" type="checkbox"/> Laboratory workers <input checked="" type="checkbox"/> Respiratory therapists <input checked="" type="checkbox"/> Physical therapists <input checked="" type="checkbox"/> Contract staff <input type="checkbox"/> Construction or renovation workers <input type="checkbox"/> Service workers	
<input checked="" type="checkbox"/> Janitorial staff <input checked="" type="checkbox"/> Maintenance or engineering staff <input type="checkbox"/> Transportation staff <input checked="" type="checkbox"/> Dietary staff <input checked="" type="checkbox"/> Receptionists <input type="checkbox"/> Trainees and students <input type="checkbox"/> Volunteers <input type="checkbox"/> Others _____	
Is baseline skin testing performed with two-step TST for HCWs? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Is baseline testing performed with QFT or other BAMT for HCWs? <input checked="" type="radio"/> Yes <input type="radio"/> No	
How frequently are HCWs tested for <i>M. tuberculosis</i> infection? Annually	
Are the <i>M. tuberculosis</i> infection test records maintained for HCWs? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Where are the <i>M. tuberculosis</i> infection test records for HCWs maintained? Who maintains the records?	1. IP - Employee Health nurse 2. EH office
If the setting has a serial TB screening program for HCWs to test for <i>M. tuberculosis</i> infection, what are the conversion rates for the previous years? [†]	
1 year ago 0	4 years ago Data unobtainable
2 years ago Data unobtainable	5 years ago Data unobtainable
3 years ago Data unobtainable	
Has the test conversion rate for <i>M. tuberculosis</i> infection been increasing or decreasing, or has it remained the same over the previous 5 years? (check one)	
<input type="radio"/> Increasing <input type="radio"/> Decreasing <input checked="" type="radio"/> No change per current data	
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 <i>M. tuberculosis</i> infection that exceeds the health-care setting's annual average?	
<input checked="" type="radio"/> Yes <input type="radio"/> No Not applicable	
For HCWs who have positive test results for <i>M. tuberculosis</i> 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?	

4. TB Infection-Control Program

Does the health-care setting have a written TB infection-control plan?	
<input checked="" type="radio"/> Yes <input type="radio"/> No	
Who is responsible for the infection-control program?	
E. H. Nurse	
When was the TB infection-control plan first written?	
May 2006	
When was the TB infection-control plan last reviewed or updated?	
2017	
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 <i>M. tuberculosis</i>)?	
<input checked="" type="radio"/> Yes <input type="radio"/> No	

Does the health-care setting have an infection-control committee (or another committee with infection control responsibilities)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, which groups are represented on the infection-control committee? (Check all that apply.)	<input checked="" type="checkbox"/> Physicians <input checked="" type="checkbox"/> Nurses <input type="checkbox"/> Epidemiologists <input type="checkbox"/> Engineers <input checked="" type="checkbox"/> Pharmacists <input checked="" type="checkbox"/> Laboratory personnel <input type="checkbox"/> Health and safety staff <input checked="" type="checkbox"/> Administrator <input checked="" type="checkbox"/> Risk assessment <input checked="" type="checkbox"/> Quality control (QC) <input checked="" type="checkbox"/> Others (specify) <u>Dietary, EVS/Plantors, Respiratory, Radiology</u>
If no, what committee is responsible for infection control in the setting?	

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

Has a person been designated to be responsible for implementing an infection-control plan in your health-care setting? If yes, list the name: <u>Sarah Cox, BSN, IP</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Based on a review of the medical records, what is the average number of days for the following:	
• Presentation of patient until collection of specimen	<u>24-72 hrs</u>
• Specimen collection until receipt by laboratory	<u><2 hrs</u>
• Receipt of specimen by laboratory until smear results are provided to health-care provider	<u><2 hrs</u>
• Diagnosis until initiation of standard antituberculosis treatment	<u>N/A</u>
• Receipt of specimen by laboratory until culture results are provided to health-care provider	<u><1 hr</u>
• Receipt of specimen by laboratory until drug-susceptibility results are provided to health-care provider	<u>48-72 hrs</u>
• Receipt of drug-susceptibility results until adjustment of antituberculosis treatment, if indicated	<u>N/A</u>
• Admission of patient to hospital until placement in airborne infection isolation (AII)	<u>Immediately</u>
Through what means (e.g., review of TST or BAMT conversion rates, patient medical records, and time analysis) are lapses in infection control recognized?	<u>Weekly IDT meetings, Monthly ICM on-Time review of all TST's, employee health screenings on-hire, lab reports, culture reports</u>
What mechanisms are in place to correct lapses in infection control?	<u>Corrective actions for lapses in IC. Education & Just-in-Time Training, 1:1 Training, staff meetings</u>
Based on measurement in routine QC exercises, is the infection-control plan being properly implemented?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is ongoing training and education regarding TB infection-control practices provided for HCWs?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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		<input checked="" type="checkbox"/>
Culture using liquid media (e.g., Bactec and MB-BacT)		<input checked="" type="checkbox"/>
Culture using solid media		<input checked="" type="checkbox"/>
Drug-susceptibility testing		<input checked="" type="checkbox"/>
Nucleic acid amplification (NAA) testing		<input checked="" type="checkbox"/>
What is the usual transport time for specimens to reach the laboratory for the following tests?		
AFB smears	<u><24 hrs</u>	
Culture using liquid media (e.g., Bactec, MB-BacT)	<u><24 hrs</u>	
Culture using solid media	<u><24 hrs</u>	
Drug-susceptibility testing	<u><24 hrs</u>	
Other (specify)	<u><24 hrs when applicable</u>	
NAA testing	<u><24 hrs</u>	

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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>SC</i> <i>Transport still <24 hrs</i> <i>on weekends. IP monitors</i> <i>daily results.</i>
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7. Environmental Controls

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

<u>Environmental control</u>	<u>Description</u>
<input checked="" type="checkbox"/> All rooms 3 : 2 INPT / 1 ED	<u>Negative pressure</u> <i>N/A</i>
<input type="checkbox"/> Local exhaust ventilation (enclosing devices and exterior devices)	<u>Single-pass system</u>
<input type="checkbox"/> General ventilation (e.g., single-pass system, recirculation system.)	
<input type="checkbox"/> Air-cleaning methods (e.g., high-efficiency particulate air [HEPA] filtration and ultraviolet germicidal irradiation [UVGI])	<u>N/A</u>

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

Room	ACH	"Remarks" - see page 6 in SW Tab & Commissioning	
		Design	Available in Plant Ops
ISO RM 13	12 Reg	9.90	Neg
OR #1	15 Reg	33.90	Pos
OR #2	16 Reg	"Remarks"	"Remarks"
PACU	16 Reg	"Remarks"	"Remarks"
Decontam	16 Reg	4.160	Neg
Clean RM	4 Reg	14.30	Pos

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)

Laboratory hoods
 Booths for sputum induction
 Tents or hoods for enclosing patient or procedure

What general ventilation systems are used in your health-care setting? (Check all that apply)

Single-pass system
 Variable air volume (VAV)
 Constant air volume (CAV)
 Recirculation system
 Other

What air-cleaning methods are used in your health-care setting? (Check all that apply)

HEPA filtration

Fixed room-air recirculation systems
 Portable room-air recirculation systems

UVGI

Duct irradiation
 Upper-air irradiation
 Portable room-air cleaners

How many AII rooms are in the health-care setting?

3

What ventilation methods are used for AII rooms? (Check all that apply)

Primary (general ventilation):

- Single-pass heating, ventilating, and air conditioning (HVAC)
- Recirculating HVAC systems

Secondary (methods to increase equivalent ACH): **N/A**

- Fixed room recirculating units
- HEPA filtration
- UVGI
- 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?

Yes No

Are environmental controls regularly checked and maintained with results recorded in maintenance logs?

Yes No

Are AII rooms checked daily for negative pressure when in use?

Yes No

Is the directional airflow in AII rooms checked daily when in use with smoke tubes or visual checks?

Yes No

Are these results readily available?

Yes No

What procedures are in place if the AII room pressure is not negative?

Plant ops Director to evaluate and develop corrective action plan.

Yes No

Do AII rooms meet the recommended pressure differential of 0.01-inch water column negative to surrounding structures?

Yes No

8. Respiratory-Protection Program

Does your health-care setting have a written respiratory-protection program?

Yes No

Which HCWs are included in the respiratory protection program? (Check all that apply)

- Janitorial staff
- Maintenance or engineering staff
- Transportation staff
- Dietary staff
- Students
- Others (specify) _____

- Physicians
- Mid-level practitioners (NPs and PAs)
- Nurses
- Administrators
- Laboratory personnel
- Contract staff
- Construction or renovation staff
- Service personnel

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).

Manufacturer
Moldex

Model
1512

Specific application

Routine contact w/ TB patients

Is annual respiratory-protection training for HCWs performed by a person with advanced training in respiratory protection?

Yes No

Does your health-care setting provide initial fit testing for HCWs?
If yes, when is it conducted? On hire

Yes No

Does your health-care setting provide periodic fit testing for HCWs? If yes, when and how frequently is it conducted?	<input checked="" type="radio"/> Yes <input type="radio"/> No Annually & change in model or individual needs
What method of fit testing is used? Describe.	Qualitative Fit-Testing by qualified & trained personnel for competency
Is qualitative fit testing used?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Is quantitative fit testing used?	<input checked="" type="radio"/> Yes <input type="radio"/> No

9. Reassessment of TB risk

How frequently is the TB risk assessment conducted or updated in the health-care setting?	Annually
When was the last TB risk assessment conducted?	unable to obtain data
What problems were identified during the previous TB risk assessment?	<ol style="list-style-type: none"> 1) Unknown - IP program being reconstructed due to inconsistencies by previous personnel for IP. 2) 3) 4) 5)
What actions were taken to address the problems identified during the previous TB risk assessment?	<ol style="list-style-type: none"> 1) N/A 2) 3) 4) 5)

Did the risk classification need to be revised as a result of the last TB risk assessment?	<input checked="" type="radio"/> Yes <input type="radio"/> No
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* 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).

