# **Tuberculosis – Exposure Control Plan**

## **POLICY:**

Midwestern State University is committed to providing a safe and healthy environment for the members of the university community by protecting the students from preventable diseases such as tuberculosis.

**PROCEDURE:** Initial and subsequent annual tuberculosis screening may be done through the Vinson Health Center or at State or local health department or private provider with the results brought to the Vinson Health Center.

### TB SCREENING IS REQUIRED ANNUALLY FOR:

- Vinson Health Center staff
- Students in health care related studies
- Employees, students, and volunteers at accredited health care facilities

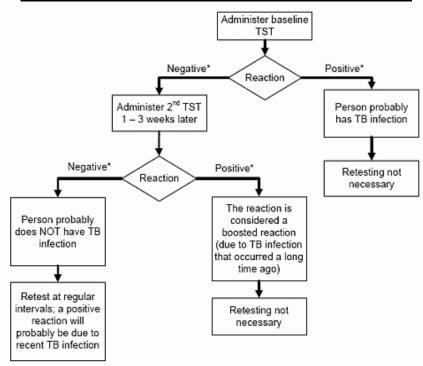
Detailed information about screening and treatment for tuberculosis can be found at the following website: <u>http://www.cdc.gov/tb/</u>

## INITIAL TUBERCULOSIS SCREENING

Applies to all individuals seeking initial tuberculosis screening, all individuals with <u>no adequately</u> <u>documented record of tuberculosis screening within the past 10 years, and all individuals who have</u> <u>never had adequate initial testing.</u>

### Purpose:

- Screening for latent tuberculosis infection
- Rough differentiation between remote and recent tuberculosis infection
- Meet CDC recommendations for new health care personnel
- Meet or exceed training and potential employment site requirements



### Two-step tuberculin skin testing: See following algorithm

- IGRA or other blood assay for *M. tuberculosis* (BAMT) testing may be used in lieu of a Mantoux test, with the same response to negative and positive results respectively
- If the first skin test is positive, IGRA or other blood assay for *M. tuberculosis* (BAMT) is the preferred next step.
- If a second tuberculosis skin test is the process chosen, the second tuberculosis skin test is administered at 1 to 3 weeks after the first; this is strongly preferred
- In special circumstances this time interval (between the first and second tuberculin skin tests) may be extended at the discretion of the medical director.

### Individual with <u>KNOWN HISTORY</u> of Tuberculosis:

- If the history is not documented, screening will include, but is not limited to:
  - Chest x-ray
  - Initial tuberculosis screening
- Response to positive screening:
  - If chest films suggest recent activity, the individual will be referred to the State or local Health Department or the individual can choose to follow up with a private physician at their own expense and provide documentation to Vinson Health Center. Active tuberculosis requires treatment plus three (3) negative sputum smears for TB before returning to work. Clearance must be documented by physician.
  - If chest x-ray shows no activity, no further testing will be required but consistent with state law regarding workers in institutional settings, the individual will be required to follow up with a private physician at their own expense or the Public Health Department and provide documentation to Vinson Health Center.
  - Subsequently, a yearly tuberculosis questionnaire will be required, following education concerning signs and symptoms of active tuberculosis infection.
- If the individual had documented ACTIVE TB in the past:
  - Acceptable documentation providing proof of adequate treatment with anti-tuberculin medication will be required.
  - A yearly TB questionnaire will be required.
  - Chest x-ray every three years.

## Individual with <u>NO KNOWN HISTORY</u> of tuberculosis and acceptable documentation of previous negative Mantoux (PPD) Tuberculin skin testing but not two-step testing or IGRA or other blood assay for *M. tuberculosis*:

- Initial tuberculosis screening at the Vinson Health Center will include two-step tuberculin testing or IGRA or other blood assay for *M. tuberculosis* (BAMT) testing to establish a baseline.
- In the absence of known exposure or evidence of ongoing TB transmission, the decision to perform TB testing after baseline will be based on the person's risk for TB exposure at work or elsewhere since that person's last test using:
  - Symptom review
  - Increased risk evaluation

# Midwestern State University Vinson Health Center

# Positive Tuberculosis skin test (TST or PPD) and subsequent IGRA or other blood assay for *M. tuberculosis* (BAMT) testing

If the initial TST is positive, , a subsequent IGRA or other blood assay for *M. tuberculosis* (BAMT) test may be performed and is strongly recommended.

- If there is a positive TST and a positive IGRA or other blood assay for *M. tuberculosis* (BAMT), the patient will be treated as a recent converter.
- If the TST is positive and the IGRA or other blood assay for *M. tuberculosis* (BAMT) is negative
  - The positive TST should be carefully documented with date and measurement of the induration
  - The individual should be rescreened annually with the risk evaluation tool and the symptom review.
- In subsequent annual screening:
  - Positive IGRA is a recent converter
  - Negative IGRA should continue annual screening with IGRA or other blood assay for *M. tuberculosis* (BAMT)
- Annual screening in individuals with a positive IGRA or other blood assay for *M. tuberculosis* (BAMT) tests
  - Annual risk evaluation and symptom review
  - CXR every 3<sup>rd</sup> year

# Individual with documents reflecting a positive IGRA or other blood assay for *M. tuberculosis* (BAMT) testing in the past

- For initial screening, if the individual has had a positive IGRA or other blood assay for *M*. *tuberculosis* (BAMT) testing in the past and has acceptable documentation of adequate treatment with anti-tuberculin medication:
  - A chest x-ray will be required (must be within three months or as recommended by the county health authority if referred to the Health Department).
    - If the chest x-ray shows no activity, satisfactory disease surveillance goals are met.
    - If the chest x-ray suggests active tuberculosis, active tuberculosis requires treatment plus three (3) negative sputum smears for TB before returning to work. Clearance must be documented by physician.
- For initial screening, if the individual has had a positive IGRA or other blood assay for *M*. *tuberculosis* (BAMT) testing in the past and has <u>no</u> acceptable documentation of adequate treatment with anti-tuberculin medication:
  - A chest x-ray will be required (must be within three months or as recommended by the county health authority if referred to the Health Department).
  - The individual will be referred to his/her private physician or the State or local Health Department.
  - Documentation of a treatment plan for latent tuberculosis infection/LTBI consistent with the regimen recommended by the county tuberculosis control center, or of a contraindication to such a plan, will be provided to Vinson Health Center prior to clearance for clinical contact.
    - Monthly documentation of compliance with LTBI will be provided in a timely fashion (within 1 week of monthly evaluation)
    - Documentation of treatment plan completion for LTBI will be provided at the end of treatment (within 1 week of completion)
    - Failure to provide either of the above will result in immediate loss of compliance required for clinical activities.
- Subsequent screening after treatment for LTBI:
  - Annual tuberculosis risk evaluation and symptom review
  - A chest x-ray if symptoms are present and routinely every three years

### An individual who has received BCG vaccination and has no history of tuberculosis

- Individuals with a history of vaccination with the Bacille Clamette Guèrin (BCG) vaccine shall be screened with a two-step tuberculin screening or an IGRA or other blood assay for *M. tuberculosis* (BAMT).
- If the two-step screening process is used for screening and is positive, the patient will be referred for confirmatory testing with an IGRA or other blood assay for *M. tuberculosis* (BAMT).
  - If confirmatory testing is positive, treat the individual as if recently infected (see Recent Converter section).
  - If two-step testing is negative, skin testing with the PPD is sufficient for annual screening (see section: *Individual with NO KNOWN HISTORY of tuberculosis and acceptable documentation of previous negative Mantoux (PPD) Tuberculin skin testing.)*

### **Recent Converters**

- TB Skin Converters (PPD) positive personnel or new positive result BAMT personnel:
  - Skin tests are to be read by qualified personnel (e.g., Vinson Health Center Nurse) at 48 hours or 72 hours interval.
  - The patient will be referred to the Public Health Department.
  - Chest x-ray will be ordered by the Vinson Health Center physician consistent with the County Health Authority/Public Health recommendations.
  - The Public Health Department will determine if the conversion represents active or latent tuberculosis infection.
    - Active tuberculosis requires treatment plus three (3) negative sputum smears for TB before returning to work. Clearance must be documented by physician.
    - Latent tuberculosis infection will require:
      - Documentation of a treatment plan for latent tuberculosis infection/LTBI consistent with the regimen recommended by the county tuberculosis control center, or of a contraindication to such a plan, will be provided to Vinson Health Center prior to clearance for clinical contact.
      - Monthly documentation of compliance with LTBI will be provided
      - Documentation of treatment plan completion for LTBI will be provided
      - Failure to provide either of the above will result in immediate loss of compliance required for clinical activities.
  - Subsequent screening:
    - Annual tuberculosis risk evaluation and symptom review
    - A chest x-ray if symptoms are present and routinely every three years

### **REFUSAL OF TREATMENT:**

- Document individual's refusal of treatment in the Health Record. The individual must sign the "Refusal of Treatment" for the refusal to be valid. (See attached form)
- Advise the individual of signs and symptoms of advancing tuberculosis infection, the risk and the alternatives, both positive and negative, for refusal of treatment upon diagnosis.
- Advise the individual to see his/her private physician. Follow-up on the progress of treatment:
  - Active Tuberculosis class participation at MSU to be terminated until the tuberculosis infection is inactive and the student is no longer infectious. This is to be determined by the Vinson Health Center physician.
  - Latent tuberculosis infection the individual will be unable to complete clinical aspects of health care related education.

# **Refusal of Treatment Form**

#### **Documentation to Decline Treatment of Latent TB Infection**

I have been identified as being infected with tuberculosis in a form called latent tuberculosis infection (LTBI). I have had explained to me that I have a lifetime risk of developing tuberculosis (TB) disease. I was offered a prescription to treat LTBI. Treatment with this medication will prevent the disease in most individuals who complete a recommended course of treatment. The medication and nursing case management will be provided at no cost to me from the local health department.

Without treatment for LTBI, the risk of developing tuberculosis (TB) in the first year following infection is approximately 5%. If the medication is not taken, I have a 1 in 20 chance of developing active TB disease within the first year. The lifetime risk of developing active TB disease is as high as 10%, or 1 in 10 people. For recently infected individuals and others at high risk for disease, that risk is greater than the risk associated with INH treatment.

I am pursuing an education in health care related fields at Midwestern State University. If I develop active TB disease, I am a risk to infect my family, faculty, students, co-workers, and the patients in my care. I have read the information on this form about treatment for LTBI. I understand the benefits and risks of taking treatment. I have had an opportunity to ask questions.

The health department has offered to provide me with the medication and the nursing case management to decrease my risk for developing tuberculosis disease. However, I have chosen not to take medication as recommended. If I should change my mind, I understand that the Health Department will be available to advise me on this matter.

NAME (PRINT)	DATE OF BIRTH
ADDRESS (STREET, CITY, STATE, ZIP)	COUNTRY OF ORIGIN
SIGNATURE OF PERSON REFUSING LTBI TREATMENT	DATE
NOTARY NAME (PRINT)	
NOTARY SIGNATURE	DATE