POLICY:

It is the policy of Midwestern State University College of Health Sciences and Human Services to screen all students and faculty for tuberculosis prior to patient contact. Texas law does not address tuberculosis screening in higher education for health and human services. It is the policy of United Regional Hospital and most hospitals to properly screen all employees & Licensed Independent providers (LIP’s) for the presence of inactive or active tuberculosis at the time of credentialing and at least annually thereafter. Therefore:

- To protect patients
- To protect students
- To enhance clinical education placement potential
- To enhance future employment opportunities

The MSU College of Health Sciences and Human Services will screen all students and faculty for tuberculosis prior to participation in clinical settings with patient contact in a consistent manner.

DEFINITION:

This policy will apply to, but is not limited to, students in the following programs:

- Athletic training
- Clinical laboratory science
- Dental hygiene
- Radiologic sciences
- Respiratory care
- Nursing
- Social work

PROCEDURE: Tuberculosis exposure 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.
Screening:

Individual with no record of tuberculosis skin testing within the past 10 years

**Purpose:**
- Screening for remote tuberculosis infection
- Rough differentiation between remote and recent tuberculosis infection
- Meet CDC recommendations for new healthcare personnel

**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 (Serum assay testing is significantly more costly)
Individual with **KNOWN HISTORY** of Tuberculosis:

- If the history is not documented, screening will include:
  - Chest x-ray
  - Intermediate Tuberculin skin test (5 TU) for questionable diagnosis
  - 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 (Serum assay testing is significantly more costly)

- 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 screening is negative in the context of an undocumented verbal history of tuberculosis, the patient will complete the two-step tuberculin skin testing documented previously.

- 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.
Individual with **NO KNOWN HISTORY** of tuberculosis and acceptable documentation of previous negative Mantoux (PPD) Tuberculin skin testing:

- Testing method will include:
  
  - Intermediate tuberculin skin test (5 TU).
  - The skin test should be read in 48-72 hours from administration.
  - If skin test develops no induration or an induration area is less than 10 mm, no additional skin testing is required.
  - If the skin test is positive (≥10mm induration) the patient will be considered a recent converter (see Recent Converter section).
  - Chest x-rays will be required only for those who have a significant PPD with an induration of greater than 10 mm.

- 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 (Serum assay testing is significantly more costly)
Individual with documents reflecting a positive PPD in the past

- For initial screening, if the individual has had a significant Mantoux (PPD) in the past and has acceptable documentation of adequate treatment with anti-tuberculin medication:
  - A chest x-ray will be required.
    - 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 significant Mantoux (PPD) in the past and has no acceptable documentation of adequate treatment with anti-tuberculin medication:
  - 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 completion treatment 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:
  - Annual tuberculosis questionnaire
  - A chest x-ray if symptoms are present and routinely every four years
An individual who has received BCG vaccination and has no history of tuberculosis

- Mantoux (PPD) skin test using **5 TU strength** PPD.
  - If the induration is greater than 10 mm, and the BCG was given more than one (1) year ago, treat the individual as if recently infected (see New Converter section).
  - If the induration is less than 10 mm, the patient has a negative skin test; individuals having a negative PPD skin test will be retested on an annual basis.
Recent Converters

- TB Skin Converters (PPD) Positive Personnel:
  - Skin test to be read by qualified personnel (e.g., Vinson Health Center Nurse) at 48 hours or 72 hours interval.
  - Chest x-ray will be ordered by the Vinson Health Center physician, if applicable.
  - The patient will be referred to the Public Health Department for the prescription of medications according to the prophylactic regimen recommended by the County TB Control Center.
  - 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 completion treatment 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 questionnaire
    - A chest x-ray if symptoms are present and routinely every four years

EMPLOYEE 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.
• 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:
  
  o Active Tuberculosis – class participation at MSU to be terminated until the tuberculosis infection is inactive and the employee is no longer infectious. This is to be determined by the Vinson Health Center physician.

  o Latent tuberculosis infection – the individual will be unable to complete clinical aspects of health care related education.
Positive Tuberculosis skin test (TST or PPD) and subsequent IGRA testing

If the initial TST is positive, and the patient requires further investigation to enhance the likelihood of compliance, a subsequent IGRA test may be performed.

- If there is a positive TST and a positive IGRA, the patient will be treated as a recent converter.

- If the TST is positive and the IGRA is negative
  - The positive TST should be carefully documented with date and measurement of the induration
  - The individual should be rescreened annually

- The first repeat screen should be with IGRA
  - Positive IGRA is a recent converter
  - Negative IGRA should be rescreened annually

- Annual screening in individuals with two confirmed IGRA tests
  - Annual questionnaire
  - IGRA test every 4th year