

Name of Policy: Mandatory Tuberculosis (TB) Screening of Students from World Health Organization-Designated High TB Prevalence Countries



Policy Number: 3364-81-04-030

Effective date: 07/01/09

Approving Officer: Provost and Executive Vice President for Health Affairs

Responsible Agent: Director of Student Services, Main Campus Medical Center

Scope: All University of Toledo Campuses

<input checked="" type="checkbox"/> New policy proposal	<input type="checkbox"/> Minor/technical revision of existing policy
<input type="checkbox"/> Major revision of existing policy	<input type="checkbox"/> Reaffirmation of existing policy

(A) Policy statement

Commencing with fall semester 2009, and in accordance with the recommendations of the Centers for Disease Control (CDC) and the American College Health Association (ACHA), all international students with country of birth, country of citizenship, or application address indicating time spent in a country of high tuberculosis (TB) incidence per the World Health Organization (WHO) will be subject to mandatory onsite screening for active or latent tuberculosis. ("High Incidence" areas are defined as having reported or estimated incidence of 20 or more cases per 100,000 population, see

<http://www.who.int/globalatlas/dataQuery/default.asp>
www.who.int/globalatlas/dataQuery/default.asp for updates.)

Mandatory TB testing will be billed at cost to current and admitted students. Screening will be conducted at The University of Toledo (UT) and will consist of one or more mandatory tests depending upon the student's health status. International students from WHO-designated high TB incidence countries as defined above will be directed to the Main Campus Medical Center or University Health Service on the Health Science Campus for symptom screening and needed testing. Students will be permitted to submit documentation of past TB testing or treatment. If prior treatment for either active or latent TB can be reliably documented, further testing will be at the discretion of the physician but will generally consist of symptom screen and updated chest x-ray. Reliable documentation of negative TB skin or blood testing completed in the US within the prior 90 days will be accepted and, in the absence of symptoms, will negate the need for further testing at UT. Also, for continuing international students from high TB incidence countries as above who are enrolled in health professions programs, past negative annual TB skin test results will suffice concerning testing under this policy. Otherwise, screening for active or latent TB will be done using the QuantiFERON-TB test (QFT).

If the symptom screen and QFT test are negative, screening is complete; the student is then permitted to register and attend on-campus classes and reside in a residence hall.

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If the QFT test is positive, further evaluation will be required in order to determine whether the TB infection is active or latent (inactive), including a mandatory frontal chest X-ray ordered and performed at UT.

For students who meet the criteria for a latent TB infection (positive QFT, negative chest X-ray, and negative symptom screen), attendance in on-campus classes, as well as living in a residence hall, will be permitted if the student undergoes standard treatment for latent TB; this treatment normally lasts 9 months. Prior to treatment, students will be asked to read and sign an informed consent statement which discloses the risks and benefits of treatment for latent TB. Liver function testing will be performed prior to treatment initiation and may be repeated during therapy at the discretion of the physician. After an initial visit with the physician, monthly follow-up visits will occur with the nursing staff to monitor for compliance and possible adverse effects; at these visits additional medication will be prescribed.

If the Quantiferon test is positive and chest x-ray has non-acute abnormal findings, Pulmonology will be asked to overread and advise regarding treatment/disposition.

Incoming or current students with suspicion of active TB, as indicated by a positive QFT with a positive symptom screen and/or abnormal chest X-ray with suspicion of active disease, will be referred for immediate UT specialist consultation for further evaluation. Students with active TB should expect to be hospitalized, isolated, and treated for at least two weeks, during which time most patients are expected to respond favorably. In rare cases of drug-resistant TB, the treatment period and isolation will be extended. Cases of active TB must be referred to the Lucas County Health Department, who will oversee contact identification and testing and any additional treatment after the student is released from the hospital.

Depending on the required time for treatment and isolation, it might be necessary for a student to take a medical drop or medical leave of absence, though alternative means for completing course requirements, including distance learning, will be considered whenever possible.

(B) Purpose of policy

Tuberculosis is a common and often deadly infectious disease, which in humans is caused primarily by the microorganism, *Mycobacterium tuberculosis*. TB is spread through the air, when people who have the disease cough, sneeze, or spit. One-third of the world's current population has been infected with *M. tuberculosis*, and new infections occur at a rate of one per second. In most individuals, *M. tuberculosis* infection is latent (inactive); however, latent infection has the potential to develop into active infection at any time, and it is estimated that about one in ten persons with latent TB infection will eventually progress to active disease. If left untreated, TB kills more than half of its victims. Identification and treatment of latent TB infection greatly reduces the likelihood of reactivation, and therefore is important for protecting the health of the individuals as well as the public by reducing the number of potential sources of infection.

The proportion of people in the general population who become sick with tuberculosis each year is stable or falling worldwide but, because of population growth, the absolute number of new cases is still increasing, mostly in developing countries. The distribution of tuberculosis is not uniform across the globe with about 80% of the population in many Asian and African countries testing positive in tuberculin tests, while only 5-10% of the US population test positive.

It is estimated that the US has 25,000 new cases of tuberculosis each year, 40% of which occur in immigrants from countries where tuberculosis is endemic. Treatment of active TB requires isolation and at least a two-week course of multiple antibiotics. Contacts are also screened and treated if necessary. Antibiotic resistance is a growing problem in multi-drug-resistant tuberculosis. Prevention relies on screening programs and vaccination.

QuantIFERON-TB testing (QFT) was approved by the Food and Drug Administration (FDA) in 2001 as an aid for detecting latent *Mycobacterium tuberculosis* infection. As recommended by the CDC and ACHA, the Quantiferon TB GOLD test will be used in place of the tuberculin (PPD) skin test for screening international students for TB; QFT is not influenced by prior BCG vaccination, which is commonly given in high-prevalence TB countries, and results in a positive PPD skin test.

Transmission of TB can only occur from people with active, not latent, TB. The chain of transmission can be broken by isolating patients with active disease and starting effective anti-tuberculous therapy. People with non-resistant active TB generally cease to be contagious with treatment, which is why students can be expected to return to classes within a few weeks after beginning treatment.

Approximately 90% of those infected with *Mycobacterium tuberculosis* have asymptomatic, latent TB infection, with only a 10% lifetime chance that a latent infection will progress to active TB disease. However, if untreated, the death rate for these active TB cases is more than 50%. For these reasons, students with latent TB will only be permitted to attend class if they agree to the mandatory treatment regimen and follow-up visits.

(D) Procedure

1. The University will communicate this mandatory TB screening policy to all current international students and future incoming international applicants and students born in or arriving from the WHO list of high TB prevalence countries. The communications will be coordinated among the various offices responsible for the policy, including the offices of Undergraduate Admissions, Graduate Admissions, International Student Services, the student health clinics, the Provosts' offices, and Student Affairs on both campuses, as well as the University's website and other communication vehicles.
2. Effective for fall semester 2009 registration, TB registration holds will be placed on all admitted incoming students for whom the policy applies until mandatory onsite TB testing has been completed. Effective for spring semester 2010 registration, TB registration holds will be placed on all continuing students for whom the policy applies until mandatory onsite TB testing has been completed.
3. All students identified will be subject to mandatory TB screening conducted at The University of Toledo (UT). The appropriate screening protocol will be determined by a UT physician and will consist of a number of mandatory tests depending upon the student's health status. All international students from WHO-designated high TB prevalence countries will be interviewed, screened for symptoms, and permitted to submit any documentation of past BCG vaccination, TB testing, and treatment for TB. If prior adequate treatment for either active or latent TB can be reliably documented, then additional treatment may not be

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required. In the absence of proof of prior treatment or if a UTMC physician deems it necessary to proceed with TB testing, screening for active or latent TB will be done using the QuantiFERON-TB GOLDtest (QFT) performed by UTMC.

4. Once the UT student health clinics verify that screening/testing has been completed, a student's TB registration hold will be removed.
 - a) If the symptom screen and QFT test are negative, screening is complete; the student is then permitted to register and attend classes.
 - b) If the QFT test is positive, further evaluation will be required in order to determine whether the TB infection is active or latent (inactive), including a mandatory frontal chest X-ray ordered and performed at UTMC.
 - c) For students who meet the criteria for a latent TB infection (positive QFT, negative chest X-ray, and negative symptom screen), matriculation and attendance in classes, as well as living in a residence hall, will be permitted if the student undergoes treatment as required by a UT physician, including mandatory follow-up visits.
 - d) Incoming or current students with active TB, as indicated by a positive QFT with a positive symptom screen and/or abnormal chest X-ray, will be subject to mandatory TB isolation (hospitalization). Students with active TB should expect to be hospitalized, isolated, and treated for at least two weeks, during which time most patients are expected to respond favorably. In rare cases of drug-resistant TB, the treatment period and isolation will be extended. Cases of active TB must be referred to the Lucas County Health Department, who will oversee contact identification and testing and any additional treatment after the student is released from the hospital. Depending on the required time for treatment and isolation, it might be necessary for a student to take a medical drop or be placed on a medical leave of absence, though alternative means for completing course requirements, including distance learning, will be considered whenever possible.

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References:

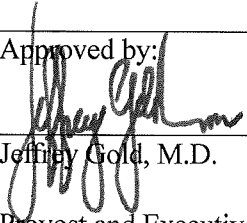
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World Health Organization Global Tuberculosis Control, WHO Report 2006, Countries with Tuberculosis incidence rates of > 20 cases per 100,000 population. For updates, refer to <http://apps.who.int/globalatlas/dataQuery/default.asp>

<p>Approved by:</p> <p> _____ Jeffrey Gold, M.D. Provost and Executive Vice President for Health Affairs</p> <p>_____ Title</p> <p><u>10/28/09</u> _____ Date</p>	<p>Policies Affected by This Policy: None</p> <p>Initial effective date: 07/01/09</p> <p>Review/Revision Date:</p> <p>Next review date: 07/01/12 (three years from most recent revision/review date)</p>
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