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MEDCOM Regulation No. 40-64

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Medical Services THE TUBERCULOSIS SURVEILLANCE AND CONTROL PROGRAM

Supplementation of this regulation and establishment of forms other than MEDCOM forms are prohibited without prior approval from HQ MEDCOM, ATTN: MCPO-SA.

1. History. This issue publishes a new regulation.

2. Purpose. The purpose of the Tuberculosis (TB) Surveillance and Control Program is to prevent new cases of TB through prompt identification and treatment of both TB infection and disease. This regulation prescribes policy and procedures for testing, evaluating, treating, monitoring, referring, documenting, and tracking Army personnel and beneficiaries at risk for TB. It also assigns responsibilities applicable to key personnel working with this program.

3. Applicability. This regulation applies to personnel in all U.S. Army Medical Command (MEDCOM) installations and activities.

4. References. References are listed at appendix A. (See *Note* at appendix A for information specific to references in this regulation.)

5. Responsibilities

a. The Office of The Surgeon General/MEDCOM G-3/5/7 Health & Wellness is responsible for the oversight of practice standards and providing regulation updates as applicable.

b. The U.S. Army Public Health Command (PHC) will provide disease and epidemiology surveillance, relevant training, and resources that support the TB Surveillance and Control Program.

c. Regional medical command preventive medicine (PM) physicians will ensure subordinate military treatment facilities (MTFs) maintain effective TB control programs.

d. MTF Commanders are responsible for ensuring that PM personnel have sufficient staffing, resources, and training to implement the TB Surveillance and Control Program.

e. PM chiefs are responsible for oversight and program supervision of MTF and installation-level TB surveillance and control activities, including testing and treatment.

f. A PM physician, or other licensed independent provider, will initially evaluate individual patients for TB and prescribe appropriate treatment. A licensed independent provider must also prescribe all refills.

g. The Chief, Army Public Health Nursing (APHN) is responsible for TB program management and implementation, including TB disease reporting, surveillance, quality assurance of TB testing and treatment, and nursing case management. Nursing case management includes verification of cases, disease reporting, coordination of treatment and support services, contact investigations, supervision of therapy, and administration of directly observed therapy (DOT) when appropriate.

h. The infection control committee will establish policies and procedures that ensure the rapid identification of TB patients, as well as proper isolation, application of personal protective equipment, and other control measures. The infection control nurse, with assistance from APHN and occupational health (OH), will ensure that training and education regarding TB infection-control practices is provided for all healthcare workers (HCWs).

i. Each MTF OH service will determine which workers are at risk for TB by performing a TB risk assessment based on the risk assessment of the facility, the TB exposures anticipated during occupational activities, and individual risk factors consistent with reference (*m*). OH will ensure that targeted TB testing is performed both at baseline and periodically. However, they will also ensure that targeted testing is performed (that is, testing only those employees indicated by the TB risk assessment). The OH service will perform surveillance for tuberculin skin test (TST) conversions and will report this information to the infection control committee and the APHN annually as part of the MTF's TB risk assessment.

6. Background

a. TB is a disease caused by a bacterium called *Mycobacterium tuberculosis* and is one of the three leading causes of death worldwide. It poses a potential threat to force health protection and is a public health concern for the U.S. Army. TB is uncommon in the United States; in 2012, the incidence of TB disease was 3.2 per 100,000 population, the lowest ever recorded. The risk of TB disease in the U.S. military is even lower, typically less than 1 per 100,000 population (reference *(s)*). The prevalence of latent tuberculosis infection (LTBI) in the United States is estimated at 4 percent overall, but is 1 percent in military-aged groups. As the prevalence of TB in most military populations is low, testing of low-risk-of-disease persons should be avoided and replaced with targeted testing of high-risk individuals based on risk assessment, usually with a simple questionnaire.

b. The principal risk factors for acquiring TB infection include birth in a country with high incidence of TB disease, a weakened immune system, prolonged community residence in a TB endemic country or residing with someone from a TB endemic country, exposure to a person known to have infectious TB disease, or working or residing with people who are at high risk for TB in facilities or institutions such as hospitals, homeless shelters, correctional facilities, nursing homes, and residential homes for those with human immunodeficiency virus.

c. Deployment to or other military service in TB endemic countries, even for periods in excess of a year, has not been shown to be a risk factor for TB for most average-risk Service members, including the Korean War, Vietnam War, and the current conflicts. Prisoners of war are the only group to demonstrate higher rates of TB disease after military deployment.

d. Based on civilian studies, other groups assumed to be at increased risk are HCWs caring for TB patients at hospitals and individuals working at prisons and detainee facilities where TB may be present. Nearly all MTFs in the Military Health System are considered low risk according to Centers for Disease Control and Prevention (CDC) standards (see reference (m)). However, MTFs should reassess their risk status annually in accordance with reference (m).

e. Given the low prevalence of LTBI and very low incidence of TB in the United States, routine testing of individuals (including most low-risk HCWs) presents a false impression of risk. Targeted testing of key groups, following identification using a questionnaire to screen for risk factors, is preferred over universal testing. In settings with a low prevalence of LTBI, universal testing has resulted in significant numbers of false positives (more than 50 percent); military members represent a low prevalence group (1 percent prevalence for LTBI). Treatment for LTBI has a small risk of serious liver inflammation or hepatitis; reducing the number of individuals tested reduces the risk that false positives will lead to unnecessary treatment. Targeted testing could reduce the number of tests by more than 90 percent (reference (u)).

7. Testing for tuberculosis

a. Rule out TB disease. An important part of any testing program is the identification of cases of TB disease. Any Soldier with signs or symptoms suggestive of TB disease (cough, fever, night sweats, weight loss, fatigue, and pleuritic pain) listed in reference (*j*) requires immediate medical evaluation by a licensed independent provider.

b. Targeted testing.

(1) Both the CDC and the Assistant Secretary of Defense (Health Affairs) (ASD (HA)) recommend that TB testing should be targeted to individuals at high risk and discouraged in those at low risk (references (a), (j), and (l)). Consistent with these policies and recommendations, the U.S. Army will use targeted testing in all settings.

Personnel responsible for local TB control programs should ensure that testing adheres to these policies and recommendations.

(2) Persons at high risk for TB are described in paragraph 6*b*, above. A complete list of risk factors is included in reference (*j*).

c. Populations to be tested and use of forms.

(1) Both CDC and ASD (HA) state that TB skin testing should be targeted in all populations.

(2) Army-specific settings that are not addressed by CDC include initial military training, pre-deployment, deployment, post-deployment, the periodic health assessment (PHA), and separation. These are discussed in the paragraphs below. Only targeted testing will be performed in these settings.

(a) Accession. Personnel on initial military training for active duty of 30 days or more will undergo targeted testing as part of reception processing (reference (d)). Universal skin testing on accession will not be performed. Instead, testing will be targeted through the use of MEDCOM Form 829 (Initial Entry TB Risk Assessment Tool). All Soldiers will complete the risk assessment tool (RAT); only individuals with at least one risk factor identified by the RAT will be tested for TB.

(b) Pre-deployment. There will be no testing in the pre-deployment setting (reference (f)). Targeted testing will be performed at the PHA as described below. Targeted testing, defined as testing among only those at high risk for TB infection or progression to TB disease, has been recommended by the CDC since 2000. Soldiers in the pre-deployment setting are at very low risk for new infection since: 1) they have already been assessed for TB at initial entry, and 2) any interim exposures would have been assessed at the time of the exposure or during the PHA. Universal testing of low-risk populations results in significant numbers of false positives (more than 50 percent). Treatment for LTBI has a small risk of serious liver inflammation or hepatitis; reducing the number of individuals tested reduces the risk that false positives will lead to unnecessary treatment.

(c) During deployment. Testing should not be routinely performed during deployment. Contact investigations of cases of TB disease must be performed under the guidance of the Theater PM consultant.

(*d*) Post-deployment. There will be no testing in conjunction with the postdeployment health assessment or the post-deployment health re-assessment. Postdeployment TB risk assessment will be performed at the time of the PHA as described below.

(e) Periodic health assessment. Soldiers will have annual tuberculosis exposure risk assessment completed during the PHA using MEDCOM Form 830 (Periodic

Tuberculosis (TB) Risk Assessment Tool). Again, only those with a risk factor identified by the RAT will go on to receive TB testing.

(f) Other military service in TB-endemic countries. No specific testing is routinely indicated prior to or after service in TB-endemic countries. Targeted testing using MEDCOM Form 830 will be performed during the annual PHA as described above.

(g) Separation. Universal testing will not be performed. MEDCOM Form 830 will be used for target testing in this setting.

Note: MEDCOM Form 829, MEDCOM Form 830, and MEDCOM Form 831 (Health Care Worker TB Risk Assessment Tool) (discussed below) are designed to be self-administered and reviewed by a registered nurse, licensed practical nurse, or medic. Only nurses and medics that possess current annual certification training by APHN are authorized to administer and review TB skin tests. MTFs with allergy/immunization departments that administer TSTs will coordinate training, supervision, and oversight with PM. Any positive response to the TB risk assessment will be referred to a licensed independent provider, as indicated by the RATs. The TB risk assessments will be documented in the electronic medical record at the time of administration.

(3) Other groups. CDC guidelines will be followed in the following settings and populations.

(a) History of prior TB infection or disease. If a person has a history of diagnosis or treatment for either infection or disease, the TB RATs described above should still be used. The tools will help determine the need for further testing, evaluation, and treatment.

(b) Healthcare workers.

1. Targeted testing among HCWs should occur based on the MTF's annual TB risk assessment (reference *(m)*) and individual risk factors in accordance with current CDC guidelines (reference *(j)*). MEDCOM Form 831 will be used in place of the MEDCOM Form 830 for identified hospital personnel.

2. Most military MTFs are low-risk facilities when using the criteria listed in reference (*m*). Low-risk facilities require only baseline testing (upon entry into the facility) of those employees who may be expected to care for TB patients or who may be in contact with TB lab specimens. Two-step testing with Tubersol[®] brand TST should be used in this setting. For other employees, no initial testing is required. No annual testing is recommended for any employee in a low-risk facility. Testing after baseline is only indicated if an exposure occurs.

3. In accordance with reference (m), any employees who have documentation of diagnosis or treatment for TB infection or disease do not require further testing with TST, interferon-gamma release assays (IGRAs), or chest x rays. Instead, these

individuals should undergo a symptom screening. The frequency of the symptom screening should be determined by the risk classification for the setting.

(c) Targeted testing of inmates and workers in prisons, detention, and confinement facilities should occur according to CDC guidelines (reference (p)).

(d) Pre-departure medical examinations for international military students, civilians, and authorized dependents should, as stated in reference (e), be performed in the country of origin. However, since several cases of TB disease in this population have occurred in recent years (reference (h)), additional TB assessment should occur at time of entry into the United States using the MEDCOM Form 829.

(e) Workers at child care and school facilities are not a high-risk group, and routine testing is not recommended in these groups by the CDC. Therefore, only targeted testing of these groups will be performed in accordance with CDC guidelines. Targeted testing will only be performed in this group as part of the pre-placement examination. Additional testing (for example, annual testing) will not be performed unless there is a known exposure to a case of TB disease.

(f) For previous Bacillus Calmette Guérin (BCG) vaccination, targeted TB testing procedures are the same among BCG-vaccinated and unvaccinated personnel (reference *(j)*).

(g) TB testing is both safe and reliable throughout pregnancy and should be administered as appropriate.

(*h*) Prospective Department of the Army employees, current employees, students, and volunteers may be required to undergo targeted TB testing as a condition for employment in healthcare facilities or in other facilities where TB transmission is of substantial concern, as defined in this regulation, by the CDC, or by State law or local ordinance.

(i) Contracting officers and their representatives will include requirements in all contracts to ensure that contractors and their employees undergo targeted TB testing whenever said employees are working in an environment in which Department of Defense (DOD) employees would normally be required to undergo this testing. TB testing and treatment will be paid for by the contractor.

8. Diagnostic tests for LTBI

a. There are currently four U.S. Food and Drug Administration-approved tests available for diagnosis of LTBI. These include two brands of TST (Tubersol[®] and Aplisol[®]) and two brands of IGRAs (QuantiFERON[®] Gold-in-Tube and T-SPOT.TB[®]). The IGRAs are designed for use in place of, and not in addition to, a TST. Thus, a reactive/positive TST should not be followed by an IGRA for verification or confirmation except in special circumstances, as specified in reference (*k*).

(1) Tubersol[®] is the preferred skin test product in the DOD in accordance with reference (g). Aplisol[®] has been associated with false positive results in military and civilian populations (reference *(t)*). Although less desirable in military populations, Aplisol[®] may be used for TB testing during shortages of Tubersol[®].

(2) Guidelines for the use of the TST are available in reference (*i*). TST may be placed concurrently with live-virus vaccines or delayed until at least 4 weeks after live-virus vaccine administration. The area of induration (palpable raised hardened area) around the site of injection is the reaction to tuberculin. The diameter of the indurated area should be measured across the forearm (perpendicular to the long axis). Erythema (redness) should not be measured. All reactions should be recorded in millimeters, even those classified as negative. If no induration is found, "0 mm" should be recorded. Reactions are categorized according to the risk stratified interpretation recommended by the CDC in references (*j*) and (*l*). If the reading is indeterminate or the patient fails to return within 72 hours, the tuberculosis test should be carefully repeated at another site, unless either of the following occurs:

(a) Readable induration may persist up to 1 week after test placement. If the result is clearly positive between 72 hours and 1 week after test administration, the result may be considered valid and the patient should be referred to a licensed independent provider (skill level 1 or 2) for evaluation.

(b) There is suspicion of hypersensitivity to a component of the TST based on history or residual clinical findings.

(3) Administration and reading of TSTs require training, supervision, and oversight by local PM personnel. APHN will provide annual TB certification training for all healthcare staff placing and reading TSTs, except for allergy/immunology staff that have completed the Immunology and Allergy Specialty (Y8) course. This training will include testing technique, current CDC guidelines for TB testing and surveillance, and local policies and procedures to ensure TST administration, interpretation, and follow-up are accomplished to standard. This includes personnel not assigned to the MTF who administer TSTs on the installation, such as Soldier readiness processing activities and medics organic to non-MTF units. References (*m*) and (*q*) provide useful training materials and appendix F of reference (*m*) provides a useful checklist which can be used to demonstrate competence in TST administration and reading.

(4) To reduce the likelihood that a boosted reaction will be misinterpreted as recent infection, two-step testing should be conducted as the initial testing for persons who will be tested periodically (for example, HCWs). In two-step testing, if an initial placement is negative, a second test is placed 1-3 weeks later. A positive result on either test should be evaluated according to CDC guidelines. Two-step testing is not needed when using IGRAs.

(5) Tubersol[®] brand TST is also preferred to the IGRAs in military populations, although the IGRAs may be used for TB testing during shortages of Tubersol® or for other compelling reasons (reference (*k*)). The IGRAs are more costly, are logistically difficult in mass testing settings, and create a substantial burden on the supporting laboratory. The IGRAs also have more variability in serial testing than the TST, leading to difficulty in test interpretation. Finally, there is substantial discordance between the TST and IGRA in military populations, leading to difficulty in test interpretation over time when alternating between the tests (reference (*v*)).

(6) Guidelines for the use of the IGRAs are available in reference (g). As with the TST, laboratories performing IGRA testing should always report the quantitative test results (for example, IU/ml or number of spots to nil, TB antigen, and mitogen) as well as the qualitative test interpretation (for example, "positive" or "negative").

9. Evaluation and referral

a. All individuals with TST reaction of 5 millimeter (mm) induration or larger or who have a positive IGRA will be referred to PM and will receive a medical evaluation by a physician or other appropriately licensed independent provider.

b. In accordance with reference (*j*), TST in persons vaccinated with BCG should be interpreted using the same criteria for those not BCG vaccinated.

c. Medical evaluation should be performed in accordance with CDC guidelines (reference *(j)*). The first step in the evaluation is to determine if TB disease is present. The evaluation will include a careful medical history and physical exam to elicit signs and symptoms suggestive of TB disease and a chest x ray.

d. Persons suspected of having TB disease require at least three sputum samples for acid fast smear and culture. CDC recommends that nucleic acid amplification tests be performed on at least one respiratory specimen from each patient with signs and symptoms of pulmonary TB for whom a diagnosis of TB is being considered but has not yet been established and for whom the test result would alter case management or TB control activities (reference *(o)*). Persons who have TB disease will be treated in accordance with CDC guidelines (reference *(r)*). Additionally, for all cases of culture-positive TB disease, a sample will be forwarded to the responsible State health department for genotyping.

e. Soldiers with confirmed cases of TB disease are subject to the following:

(1) If identified within the first 6 months as not meeting medical procurement standards (AR 40-501, chapter 2) but meeting retention standards (AR 40-501, chapter 3), initiation of entrance physical standards board (EPSBD) proceedings according to AR 40-400, paragraph 7-12.

(2) If identified after the initial 180 days of active duty or active duty for training as not meeting medical retention standards (AR 40-501, chapter 3), referral to a medical evaluation board in accordance with AR 40-400, paragraph 7-1.

f. Once TB disease is ruled out-

(1) Treatment of LTBI should be considered for all individuals meeting the risk stratified interpretation criteria for a positive TST recommended by the CDC (references *(j)* and *(I)*). The treating provider will consider individual patient factors, including TB exposures, medical history, risk of adverse events from treatment, and patient preferences.

(2) If identified within the first 6 months as not meeting medical procurement standards (AR 40-501, para 2-30h(4)), initiate EPSBD proceedings in accordance with AR 40-400, paragraph 7-12. Since LTBI by definition is asymptomatic and causes no disability, separation from the Army for this condition would be expected only in extremely rare circumstances such as severe adverse events, contraindications to all of the LTBI treatment regimens, or Soldier noncompliance with treatment.

(3) Documentation in AHLTA of TB testing and LTBI evaluation is sufficient to address any future questions of whether the infection is Service-connected.

10. Treatment and monitoring of LTBI

a. Treatment regimens. Treatment regimens have been published by the CDC and provide guidance on drugs, intervals, and duration for LTBI treatment (references *(i), (j)* and *(l)*). All treating providers and public health nurses will be knowledgeable about and proficient in the use of these guidelines and all relevant updates. This summary policy addresses military-unique issues related to TB; it is not a substitute for CDC guidance. Selection of the appropriate LTBI treatment regimen is based on clinical evaluation and consultation with a physician. Preferred specialists for prescribing initial treatment are physicians certified in a PM specialty (including public health and occupational medicine), but can also be done by any licensed independent provider. Only public health nurses who are advanced practice privileged skill level 1 or 2 are authorized to initiate LTBI treatment or refill LTBI treatment medications. If there is any doubt about the possibility of TB disease, the preferred consultant is a pulmonary or infectious diseases specialist. Treatment options include—

(1) Isoniazid (INH) daily for 9 months, to accomplish 270 daily doses within 12 months. Twice weekly INH may also be given for 9 months, but only as DOT, as per reference (j).

(2) INH and Rifapentine (RPT) administered weekly for 12 weeks as DOT. This regimen may result in improvements in adherence and program management due to the shorter treatment regimen and better follow-up. Due to these potential benefits to the TB control program, the INH/RPT regimen may be preferred in certain populations.

However, as per reference (n), this regimen should be monitored closely for hypersensitivity reactions and other adverse drug events.

(3) Rifampin daily either for 4 months (adults) or 6 months (children) to accomplish 120 doses or 180 doses, respectively, is another acceptable regimen, as per reference *(j)*.

Note: MEDCOM Form 832 (Rifampin Clinic Flow Sheet) and MEDCOM Form 833 (Isoniazid (INH) and Rifapentine (RPT) Directly Observed Therapy (DOT) for Latent TB Infection (LTBI)) accompany Department of the Army (DA) Form 5569 (Isoniazid (INH) Clinic Flow Sheet) to assist with assessment and documentation of the above treatment options.

b. Initiation of LTBI treatment is compulsory at time of initial military training or for Soldiers who are retained as an outcome of the EPSBD (see para 9 f(2), above), unless medically contraindicated. Treatment at other times is not compulsory.

c. Treatment of individuals with LTBI who are deploying is preferred. Recommendation for deferral of treatment is made by the evaluating provider on a case-by-case basis. Relevant factors to consider in this decision include risk of infection (versus likelihood of false-positive result), risk of progression to TB disease, risk of adverse events from therapy, operational duties of the individual, ability to monitor and manage adverse drug events, and patient preferences.

d. For pregnant women with LTBI, decisions to initiate treatment will be made in consultation with the provider managing her pregnancy.

e. Management of pediatric LTBI patients will be determined by the individual MTF based on coordination among chiefs of PM, APHN, pediatrics, and primary care. When follow-up care of patients with TB disease is provided by pediatrics or primary care, the APHN will still be responsible for case management, surveillance, and program oversight.

f. Patients on LTBI treatment will be provided appropriate education on the disease process, treatment options, risks and benefits of the medication prescribed, and their individual treatment plan.

g. Regardless of the LTBI treatment regimen selected, patients will be evaluated monthly prior to medication refill. This evaluation will include assessment of treatment adherence, symptoms of adverse drug events, the individual treatment plan, risks and benefits of LTBI treatment, signs and symptoms of TB disease, and other patient concerns. This evaluation may be performed by a licensed independent provider or by a public health nurse. If an initial evaluation is performed by a public health nurse, any adverse drug events must be referred to a licensed independent provider for evaluation.

h. Routine baseline laboratory testing is not indicated at any age. Baseline hepatic enzymes are checked in patients with viral hepatitis or HIV, who are pregnant or have delivered within the last 3 months, who use alcohol regularly, who have other history or risk of liver disease, or those taking potentially hepatotoxic medications. Laboratory monitoring during treatment is indicated for patients with abnormal baseline evaluation, high risk for hepatic disease, HIV, pregnancy, or other symptoms of hepatotoxicity. If transaminase levels exceed three times the upper limit of the normal range of the laboratory, a physician or other appropriately privileged provider will make a recommendation on the continuation of treatment with consideration of TB disease risk and the need for close clinical monitoring.

11. Documentation and tracking

a. TB disease is a communicable disease that must be reported through military and civilian public health channels. A report of a verified case of tuberculosis (RVCT) will be completed for each case of TB disease. The RVCT will be sent to the supporting county and/or State health department and reported to the Army Public Health Command via the Disease Reporting System internet (DRSi). Latent TB is not a reportable event.

b. All TB testing and results will be entered into the database of the Medical Operational Data System (MODS)/Medical Protection System (MEDPROS) and AHLTA. The date of test, manufacturer, lot number, date of TST reading, TST result in mm, and individual placing and reading each test will be documented. Individuals with positive test results, as per CDC guidelines, will have the medical exemption code, "Medical Permanent", entered into MODS/MEDPROS to document no further need for testing.

c. IGRA testing dates and results will also be entered into medical records. The following data elements will be recorded in the electronic medical record: the date of test, manufacturer, lot number, all quantitative test results, and test interpretation according to CDC guidance (reference (g)).

d. The APHN at each MTF will document performance of a TB risk assessment annually for each facility. The risk assessment will be conducted per facility guidelines. This assessment will be reported to the infection control committee and OH. The results of the assessment will also be communicated throughout the facility and used to determine TB surveillance requirements among HCWs in accordance with reference *(m)*. The APHN will provide the Army Institute of Public Health with the MTF's annual facility TB risk assessment via the APHN annual status report.

e. The OH service will document TB risk assessments and TST results in employee health records. OH will document and report surveillance for TST conversion among employees and will report this information to the infection control committee and the APHN annually as part of the facility risk assessment.

f. The APHN will maintain a local tuberculosis registry for all persons under treatment for TB disease and LTBI. This registry will also include contacts of TB disease cases requiring medical follow-up. Use of electronic databases is authorized when associated with information management protections and in accordance with Health Insurance Portability and Accountability requirements. DA Form 3897 (Tuberculosis Registry) is a case management and surveillance tool and can be used and maintained locally to assist with managing patient care.

g. For personnel being treated for LTBI who are undergoing a change of station, the PM service of the losing organization will send referral forms directly to the supporting PM service of the gaining organization to ensure continuity of care. If there is no MTF available, the individual will be referred to the local public health department or designated healthcare provider. Each individual will be counseled on the importance of timely follow-up and adherence to treatment protocol prior to his/her departure.

h. When personnel under treatment depart military service, or are National Guard or Reservists no longer on active duty, the PM service of the losing MTF will refer the patient for follow-up at his/her future location of residence. Follow-up care may be provided by the local health department, a military MTF, the Feds Heal Program, the Veterans Administration, or other healthcare provider.

i. The following International Classification of Diseases, 9th edition, Clinical Modification code is to be used for entering visits related to LTBI: 795.5—nonspecific reaction to tuberculin skin test without TB disease.

j. The following International Classification of Diseases, 10th edition, Clinical Modification codes are to be used for entering visits related to LTBI:

(1) LTBI identified by TST: R72.11—Nonspecific reaction to tuberculin skin test without TB disease.

(2) LTBI identified by IGRA: R72.12—Nonspecific reaction cell mediated immunity measurement of gamma interferon antigen response without TB disease.

k. Treatment completion letter. All patients who complete a course of therapy for TB disease or LTBI will receive treatment completion documentation from PM or the treating clinic. This will include at least the dates of treatment, medication given and dose, and number of doses. Precautions will be given to seek care for any future development of symptoms of TB disease. The letter will also state that no more TB skin tests or chest x-rays will be routinely administered to the patient.

12. Program management forms. The following (previously identified) forms are used with the TB Surveillance and Control Program and provide tools that support assessment, evaluation, and referral: MEDCOM Form 829, MEDCOM Form 830, MEDCOM Form 831, MEDCOM Form 832, MEDCOM Form 833, DA Form 5569, and DA Form 3897.

Appendix A References

Note: A special exception to the usual format has been granted for this appendix A as follows: For each required publication, a "previously cited as reference..." (*(a)* through *(v)*) is included that links citations in the regulation body to those in Section I of this appendix.

Section I Required Publications

AR 40-5

Preventive Medicine. (Previously cited as reference (a).)

AR 40-400

Patient Administration. (Previously cited as reference (b).)

AR 40-501

Standards of Medical Fitness. (Previously cited as reference (c).)

AR 612-201

Initial Entry/Prior Service Trainee Support. (Previously cited as reference (d).)

Medical Screening of International Military Students (IMS), Civilians, and Authorized Dependents

Defense Security Cooperation Agency; Arlington, VA: Department of Defense, 16 October 2009. (Previously cited as reference *(e)*.)

Department of Defense Instruction (DODI) 6490.03

Deployment Health, 11 August 2006. (Previously cited as reference (f).)

Assistant Secretary of Defense Health Affairs (HA) Policy 08-012

Policy for the Use of Tubersol as the Preferred Brand of Tuberculin, 29 September 2008. (Previously cited as reference (g).)

Tuberculosis among nonimmigrant visitors to U.S. military installations

Aaron CL, Fotinos MJ, West KB, Goodwin DJ and Mancuso JD *Mil Med* 2013;178(3):346-352. (Previously cited as reference *(h)*.)

Diagnostic standards and classification of tuberculosis in adults and children

American Thoracic Society; *Am J Respir Crit Care Med* 2000;161:1376–95. (Previously cited as reference *(i)*.)

Core Curriculum on Tuberculosis, Fifth Edition

Centers for Disease Control and Prevention; Atlanta, GA: U.S. Department of Health and Human Services, CDC, 2011. (Previously cited as reference *(j)*.)

Centers for Disease Control and Prevention

Morbidity and Mortality Weekly Report (MMWR) Recommendations and Reports (RR) 59 RR-05, "2010 Jun 25—Updated Guidelines for Using Interferon Gamma Release Assays to Detect Mycobacterium tuberculosis Infection," United States, 2010. (Previously cited as reference (k).)

Centers for Disease Control and Prevention

Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection, *MMWR Recommendations and Reports,* 9 June 2000, 49(RR-6);1-54. (Previously cited as reference (*I*).)

Centers for Disease Control and Prevention

Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health Care Settings," *MMWR* 2005; 54(RR-17); 30 December 2005. (Previously cited as reference *(m)*.)

Centers for Disease Control and Prevention

Recommendations for Use of an Isoniazid-Rifapentine Regimen with Direct Observation to Treat Latent Mycobacterium tuberculosis Infection. *MMWR* 2011; 60 (No. 48). December 9, 2011/60(48);1650-1653 (Previously cited as reference *(n)*.)

Centers for Disease Control and Prevention

Updated Guidelines for the Use of Nucleic Acid Amplification tests in the Diagnosis of Tuberculosis. *MMWR* 2009; 58(01):7-10. Previously cited as reference (*o*).)

Centers for Disease Control and Prevention

Prevention and Control of Tuberculosis in Correctional and Detention Facilities: Recommendations from CDC *MMWR* 2006; 55 (No. RR–09, 1–44). (Previously cited as reference (*p*).)

Centers for Disease Control and Prevention

Mantoux Tuberculin Skin Testing DVD and Facilitator Guide. Atlanta, GA: U.S. Department of Health and Human Services, CDC, March 2003. (Previously cited as reference (q).)

Centers for Disease Control and Prevention

Treatment of Tuberculosis. *MMWR* 2003 RR 52 (No. RR-11). (Previously cited as reference *(r)*.)

An Evaluation of the Completeness and Accuracy of Active Tuberculosis Reporting in the United States Military

Mancuso JD, Tobler SK, Eick AA, Olsen CH Int J Tuberc Lung Dis, Oct 2010;14(10):1310-1315. (Previously cited as reference(s).)

Pseudoepidemics of Tuberculin Skin Test Conversions in the U.S. Army after Recent Deployments

Mancuso JD, Tobler SK, and Keep LW; *Am J Resp Crit Care Med.* 2008 Jun 1;177(11):1285-9. (Previously cited as reference *(t)*.)

Impact of Targeted Testing for Latent Tuberculosis Infection Using Commercially Available Diagnostics

Mancuso JD, Tribble D, Mazurek GH, Li Y, Olsen C, Aronson NE, Geiter L, Goodwin D, and Keep LW; *Clin Infect Dis* 2011 Aug 1:53(3); 234-244. (Previously cited as reference *(u)*.)

Discordance Among Commercially Available Diagnostics for Latent Tuberculosis Infection

Mancuso JD, Mazurek GH, Tribble D, Olsen C, Aronson NE, Geiter L, Goodwin D, and Keep LW; *Am J Resp Crit Care Med.* 2012 Feb 15:185(4):427-34. (Previously cited as reference (*v*).)

Section II Related Publications

DA Pamphlet 40-11

Preventive Medicine

DODI 6130.03

Medical Standards for Appointment, Enlistment, or Induction in the Military Services, 28 April 2010.

Deployment Health Clinical Center

Emerging Health Concerns: Tuberculosis. DOD Deployment Health Clinical Center, Bethesda, MD, 2013.

Memorandum, Assistant Secretary of Defense (Health Affairs)

Guidelines for Tuberculosis Screening and Testing, 20 April 2012.

Centers for Disease Control and Prevention

Guidelines for the Investigation of Contacts of Persons with Infectious Tuberculosis; Recommendations from the National Tuberculosis Controllers Association and CDC. MMWR 2005:RR 54 (No. RR-15).

Centers for Disease Control and Prevention

Reported Tuberculosis in the United States 2011. Atlanta, GA: U.S. Department of Health and Human Services, CDC, October 2012.

World Health Organization

Global Tuberculosis Report 2012. Geneva, Switzerland: World Health Organization, 2012.

Section III Prescribed Forms

MEDCOM Form 829 Initial Entry Tuberculosis (TB) Risk Assessment Tool

MEDCOM Form 830 Periodic Tuberculosis (TB) Risk Assessment Tool

MEDCOM Form 831 Health Care Worker Tuberculosis (TB) Risk Assessment Tool

MEDCOM Form 832 Rifampin Clinic Flow Sheet

MEDCOM Form 833 Isoniazid (INH) and Rifapentine (RPT) Directly Observed Therapy (DOT) for Latent TB Infection (LTBI)

Section IV Referenced Forms

DA Form 3897 Tuberculosis Registry

DA Form 5569 Isoniazid (INH) Clinic Flow Sheet Glossary

Section 1 Abbreviations

APHN Army Public Health Nursing

ASD (HA) Assistant Secretary of Defense (Health Affairs)

BCG Bacillus Calmette-Guérin

CDC Centers for Disease Control and Prevention

DA Department of the Army

DOD Department of Defense

DODI Department of Defense Instruction

DOT directly observed therapy

DRSi Disease Reporting System internet

EPSBD entrance physical standard board

HCW healthcare worker

IGRA interferon gamma release assay

INH Isoniazid

LTBI latent tuberculosis infection **MEDCOM Regulation 40-64**

MEDCOM United States Army Medical Command

MEDPROS Medical Protection System

mm millimeter

MODS Medical Operational Data System

MTF military treatment facility

OH occupational health

PHA periodic health assessment

PHC Public Health Command

PM preventive medicine

RAT risk assessment tool

RPT Rifapentine

RVCT report of a verified case of tuberculosis

TB tuberculosis

TST tuberculin skin test

Section II Terms

Accession

New enlistee or warrant/commissioned officer; initial entry of enlistee or warrant/commissioned officer.

Initial military training

Initial Army reception and training including enlisted, warrant officer, and officer.

Latent TB infection

Persons with latent TB infection have *M. tuberculosis* organisms in their bodies but do not have TB disease, have no symptoms, and are noninfectious. Such persons usually have a positive reaction to the tuberculin skin test or interferon-gamma release assay. Less than 10 percent of those otherwise healthy persons infected will develop disease in their lifetimes.

Licensed independent provider

For the purpose of this policy, this is a physician.

Risk assessment tool

A questionnaire which identifies risk factors, used to perform targeted testing.

Screening

The examination of a group to separate well persons from those who have an undiagnosed pathologic condition or who are at high risk. In the context of TB control programs, the term "screening" is often used to describe both universal testing and targeted TB testing programs. To avoid confusion caused by these two meanings, the term "screening" is not used in this document to indicate testing.

Separation

Release from active duty, discharge, retirement, dismissal, or resignation.

Targeted testing

Testing of only those at high risk for tuberculosis infection or progression to TB disease. Testing of low-risk populations results in false positives, and unnecessary treatment with risk of adverse drug events.

Tuberculosis disease

A communicable disease caused by the *Mycobacterium tuberculosis* complex which is spread by the respiratory route. Most cases (~80 percent) are pulmonary, with symptoms of cough, fever, night sweats, weight loss, fatigue, and pleuritic pain. The remainder of cases are extrapulmonary and can occur in the lymph nodes, meninges, and any other organ or tissue in the body. This is also called "active TB," although the preferred term is now "TB disease."

The proponent of this regulation is the OTSG, MEDCOM G-3/5/7 Directorate of Patient Care Integration. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publication and Blank Forms) to Commander, US Army Medical Command, ATTN: MCPO-SA, 2748 Worth Road, JBSA Fort Sam Houston, TX 78234-6006.

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