



DEPARTMENT OF THE NAVY

U.S. NAVAL HOSPITAL

PSC 482

FPO AP 96362-1600

USNAVHOSP OKINAWAINST 6224.1F

06F6

27 OCT 2008

USNAVHOSP OKINAWA INSTRUCTION 6224.1F

From: Commanding Officer

Subj: TUBERCULOSIS EXPOSURE CONTROL PROGRAM

- Ref:
- (a) BUMEDINST 6224.8, series
 - (b) BUMEDINST 6220.12, series
 - (c) BUMED MSG Tuberculosis Control Program
"Clarification" R 241350Z APR 01 PSN 124945E25
 - (d) Force Order 6224.1
 - (e) Master Labor Contract, Chapter 15
 - (f) Centers for Disease Control (CDC). Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005. MMWR 2005; 54 (No. RR-17)
 - (g) CDC. Guidelines for the Investigation of Contacts of Persons with Infectious Tuberculosis, Recommendations from the National Tuberculosis Controllers Association and CDC. MMWR 2005; 54 (No. RR-15)
 - (h) CDC. Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection. MMWR 2000; 49 (No. RR-6)
 - (i) CDC. Core Curriculum on Tuberculosis, What the Clinician Should Know; 4th Ed, 2000
 - (j) Diagnostic Standards and Classification of Tuberculosis in Adults and Children, Am J Respir Crit Care Med, Vol. 161, pp 1376-1395, 2000

- Encl:
- (1) BUMEDINST 6224.8 series SF-600 Overprint, Initial Evaluation for Positive Tuberculin Skin Test (TST)
 - (2) BUMEDINST 6224.8 series SF-600 Overprint, Periodic Evaluation for Patient Receiving Treatment for Latent Tuberculosis Infection (LTBI)
 - (3) BUMEDINST 6224.8 series SF-600 Overprint, Annual Evaluation for Patients with a History of a Positive Tuberculin Skin Test (TST)
 - (4) Tuberculosis Risk Assessment
 - (5) Indications for the Treatment of Latent Tuberculosis Infection

- (6) Clinical Flowchart for the Evaluation and Treatment of Latent Tuberculosis Infection
- (7) Tuberculin Skin Test Consent/Counseling Form
- (8) Isoniazid (INH) Counseling Form
- (9) Glossary

1. Purpose. To provide guidelines for tuberculosis screening, preventive therapy, treatment, and contact investigation to control and prevent tuberculosis among healthcare workers, Master Labor Contract (MLC) and other local national employees, visitors, patients, and other medical beneficiaries assigned to U.S. Naval Hospital Okinawa (USNHO) as defined by references (a) through (j) and Enclosures (1) through (9).

2. Stakeholders. To ensure proper review and revision to this instruction, the Chair, Infection Control Committee and Director of Public Health Services will be responsible for all updates and revisions.

3. Cancellation. USNAVHOSP OKINAWAINST 6224.1E

4. Background

a. Tuberculosis (TB) is a disease of public health importance associated with significant morbidity and mortality. It is endemic to Okinawa, and Japanese public health authorities report many new cases each year. The goal of this instruction is to control and prevent TB in USNHO personnel through early detection and treatment of new or unsuspected cases. Early detection and treatment reduces associated morbidity and mortality and decreases the likelihood of spreading the infection to others.

b. Active tuberculosis is characterized by symptoms, signs, radiographic or laboratory evidence of pulmonary or extrapulmonary disease caused by the bacterium *Mycobacterium tuberculosis*. Pulmonary TB is the most common form of active disease. It is also the most concerning, as nearly all cases of TB are acquired through airborne transmission, with the infecting organisms carried in secreted droplets expelled into the surrounding air when a person with pulmonary TB coughs, talks, or sneezes. Latent tuberculosis is characterized by infection with *Mycobacterium tuberculosis* as defined by a positive tuberculin skin test, but without evidence of active disease. Persons with latent TB are not infectious. However, they are at risk for progression to active disease if they do not receive appropriate antimicrobial therapy.

c. The tuberculin skin test (TST) using purified protein

derivative (PPD) is the most sensitive method for detecting individuals infected with TB. Periodic testing is a highly effective means of identifying those at risk for developing active disease who would also benefit from treatment of latent infection. An individual with latent TB has a 5%-10% lifetime risk of developing active disease if no antimicrobial therapy is administered. Appropriate treatment greatly reduces this risk.

d. Treatment with Isoniazid (INH) is the most effective measure to prevent the development of active TB in a newly infected person. The treatment of latent TB infection to prevent active disease is particularly important due to escalating resistance of *Mycobacterium tuberculosis* to numerous antibiotic medications. Refer to enclosure (8).

5. Responsibilities and Actions. Cooperation and coordination among various hospital services are required. Specific areas of responsibility are delineated as follows:

a. Chair, Infection Control Committee:

(1) Manage the TB Control Program at the Command.

(2) Ensure review and revision of this instruction at least annually and as necessary.

(3) Ensure completion of an annual TB Risk Assessment, enclosure (4), that includes evaluation of the risk of TB in the local communities that surround areas under the responsibility of the Command and outlying Branch Medical Clinics (BMCs). The assessment shall be submitted to the Infection Control Committee by 15 February of each year and maintained on file for at least three years.

(4) Ensure the Command carries out the directives in reference (a).

b. Preventive Medicine Department/Epidemiology Division:

(1) Compile data for the "Annual Summary of Tuberculosis Screening of Active Duty Personnel". USNHO shall submit the summary to the Navy Environmental Preventive Medicine Unit-6 (NEPMU-6) by 15 February of each year, in accordance with references (a) and (d).

(2) Upon notification by medical staff of any suspected or confirmed case of active TB, prepare and submit a Medical Event Report, in accordance with references (a) and (b).

(3) Provide technical support and advice, and conduct tuberculosis contact investigations, in accordance with references (a) and (g).

(4) Maintain surveillance of all USNHO patients and staff with a positive tuberculin skin test (TST) as defined in enclosure (5) and reference (c) and ensure compliance with initial, periodic (monthly), and annual TB evaluations. Maintain documentation of all newly identified positive TSTs for at least 3 years.

(5) For completion of the initial and annual TB evaluation forms, enclosures (1) and (3), refer all staff enrolled in the USNHO Healthcare Worker Surveillance Program to the Occupational Medicine Clinic and all other USNHO medical beneficiaries to their Primary Care Manager (PCM).

(6) For all USNHO patients and staff with a newly positive TST, provide TB education, and initiate the "Initial Evaluation for Positive Tuberculin Skin Test (TST)", enclosure (1).

(a) For adult patients, order required lab tests and chest x-rays, and submit a referral to the PCM or Occupational Medicine provider for clinical evaluation per enclosure (1).

(b) For pediatric patients, submit a referral to the PCM (Pediatric or Family Medicine Department) for required lab tests, chest x-rays, and clinical evaluation per enclosure (1).

(7) For USNHO staff and adult patients undergoing therapy for latent TB, perform a monthly evaluation, "Periodic Evaluation for Patients Receiving Treatment for Latent Tuberculosis Infection (LTBI)", enclosure (2). Refer patients to their PCM or Occupational Medicine provider for suspected adverse drug reaction or active TB. If an adverse drug reaction is suspected, discontinue the drug until provider evaluation.

(8) For all USNHO patients and staff with history of prior positive TST and/or who completed treatment for latent or active TB, initiate the "Annual Evaluation for Positive Tuberculin Skin Test (TST)", enclosure (3), and submit a referral to the PCM or Occupational Medicine provider for annual clinical evaluation per enclosure (3).

(9) Monitor reported cases of active TB and LTBI at the BMCs during required quarterly technical-assist visits. Any significant increase in cases or suspected outbreaks shall be

reported immediately to the Chain of Command and the Infection Control Coordinator.

c. Medical Staff:

(1) Perform a medical evaluation on all patients with a positive TST referred by the Preventive Medicine Department/Epidemiology Division and initiate treatment for LTBI, if indicated. Complete applicable sections of the TB evaluation forms, enclosures (1) and (3), as appropriate.

(2) Evaluate all patients referred by the Preventive Medicine Department/Epidemiology Division for questions concerning adverse drug reaction or active TB disease.

(3) Refer all identified patients with a history of positive TST to the Epidemiology Division for surveillance and annual evaluation, if indicated.

(4) Notify the Epidemiology Division, the Infection Control Coordinator, and the USNHO Pulmonologist when evaluating or admitting any suspected or confirmed case of active TB.

(5) Manage the care of their patients undergoing treatment for LTBI or active TB.

(6) Use proper isolation and infection control techniques to prevent further spread of the disease and indoctrinate hospital staff engaged in the routine care of tuberculosis patients on isolation and infection control measures.

d. Occupational Medicine Clinic: shall, in addition to the responsibilities and actions of the Medical Staff above, ensure N95 respirator user medical certification for active duty healthcare workers requiring evaluation (i.e., those with deployment-limiting conditions or delinquent Periodic Health Assessments) and all civilian healthcare workers.

e. Immunizations Clinic (to include BMCs):

(1) Perform, measure, and record all TSTs in accordance with reference (a). Maintain log of all patients with newly identified positive TSTs for at least 3 years.

(2) Immediately notify the Epidemiology Division or BMC Preventive Medicine Technician (PMT) or designated clinic staff member of all newly identified positive TSTs. Refer patients to the Epidemiology Division or appropriate BMC staff for evaluation.

(3) Ensure all Immunizations Clinic personnel involved in the placement, reading, interpretation, and recording of TSTs are appropriately trained for their level of responsibility.

f. Director, Directorate of Branch Medical Clinics (DBC):

(1) Provide oversight of the TB Exposure Control Program at the BMCs.

(2) Ensure the BMCs carry out the directives in reference (a).

(3) Ensure the BMC staff, under medical supervision, carries out the appropriate procedure for reporting per reference (a) following enclosure (6).

(4) Ensure Evans BMC, Torii Station Clinic, and White Beach Clinic submit the "Annual Summary of Tuberculosis Screening of Active Duty Personnel" to the Epidemiology Division at USNHO for coordination of annual submission. All other BMCs will submit the summary to the 3rd Marine Expeditionary Force (III MEF), per reference (d). All III MEF BMCs shall also submit a copy of the annual summary to the Epidemiology Division at USNHO for compilation of surveillance data.

g. Radiology Department shall promptly notify the ordering provider of any radiographic findings suggestive of active TB.

h. Safety Manager shall manage the Respiratory Protection Program, ensuring initial and annual fit testing and training of healthcare workers in the use of N95 respirators.

i. Infection Control Coordinator:

(1) Assist with training on the Tuberculosis Exposure Control Program for all healthcare workers before initial assignment to the work center.

(2) Ensure hospital staff compliance with proper isolation and infection control techniques and indoctrinate hospital staff engaged in the routine care of tuberculosis patients on isolation and infection control measures.

j. Staff Education and Training Department shall include TB training for all Command personnel at risk during Command Orientation and annual training. Infection Control/subject matter expert staff will provide the training material in

accordance with current Federal regulations and Navy Medicine Manpower, Personnel, Training and Education Command (NMPTAE) requirements.

6. Tuberculosis Exposure Control Program

a. Periodic Skin Testing

(1) TSTs shall be performed at a frequency indicated below, unless medically contraindicated. Per reference (a), pregnancy is not a contraindication to receiving a TST. A history of Bacille Calmette-Guerin (BCG) vaccination also is not a contraindication. Screening for TB, contact investigation screening, or evaluation of suspected active TB should be undertaken regardless of history of BCG vaccination.

(a) Annual Testing. Required at least annually for all active duty personnel and civilian healthcare workers, per reference (a);

(b) Triennial Testing. Required at least every 3 years for medical beneficiaries other than active duty personnel (e.g., military retirees, dependents).

(2) The "Tuberculin Skin Test Consent/Counseling Form", enclosure (7), or equivalent informed consent form, shall be completed and maintained in the medical record of all children prior to receiving a TST.

(3) If testing is not current, TSTs should be performed during medical check-in, health record verification, receipt of permanent change of station (PCS) orders, immunization reviews, and periodic health assessments.

(4) Those with a history of TB, a positive TST, or treatment for LTBI must provide medical documentation of clinical evaluations, hospitalizations, diagnoses, or treatments to be considered exempt from further testing.

(5) Procedures for testing, techniques for proper TST placement, recording of testing results, and management of missed readings will be followed in accordance with reference (a).

b. Master Labor Contract (MLC) Employees

(1) MLC employees will be screened for TB in accordance with reference (d).

(2) The Naha Labor Management Office will notify USNHO through the Department of the Navy Human Resources Office-Okinawa of any confirmed case of active TB.

(3) The Naha Labor Management Office will conduct contact investigations, notifying all co-workers in close contact with MLC employees diagnosed with active TB.

c. Positive Skin Tests

(1) Only medical department personnel with appropriate immunizations training will apply and read TSTs. The TST must be read within 48 to 72 hours. Self-read results and readings by untrained personnel are prohibited.

(2) The diameter of induration and individual risk factors for infection are used to classify a TST as positive, per enclosure (5). However, if the TST induration is 10 mm or greater than a previous TST induration within the last 3 years, the TST is also considered positive.

(3) All USNHO patients and staff with a positive TST as defined by enclosure (5) must be evaluated by the Epidemiology Division and PCM/Occupational Medicine Provider for possible active TB and for consideration of treatment for LTBI. All BMC patients will be evaluated by the respective BMC designated staff and PCM.

d. Initial Evaluation for Treatment of LTBI

(1) Before instituting treatment of LTBI, patients must undergo evaluation by the Epidemiology Division and PCM/Occupational Medicine provider.

(2) Evaluation Requirements:

(a) Appropriate history and physical examination, documented on the "Initial Evaluation of Positive Tuberculin Skin Test" SF-600 overprint, enclosure (1).

(b) A chest x-ray to rule out active TB must be obtained for patients with a newly positive TST, patients with a history of either incomplete or undocumented treatment for LTBI, and patients with other clinical indications. Chest x-rays are not indicated for patients with a positive TST as part of their required annual evaluation if they have completed LTBI therapy, have remained without symptoms, and have documentation of a baseline chest x-ray.

(c) Baseline laboratory monitoring is not routinely indicated for all patients at the start of treatment for LTBI. Measurements of serum AST (SGOT), ALT (SGPT), and bilirubin should be performed on patients whose initial evaluation suggests a liver disorder, regular alcohol use, HIV-positive status, pregnancy, or childbirth within the preceding 3 months.

(3) The "Isoniazid (INH) Counseling Form", enclosure (8), shall be completed and maintained in the medical record of all patients prior to initiating INH therapy for LTBI.

e. Treatment of LTBI

(1) Patients with a positive TST without evidence of active TB shall undergo appropriate antimicrobial therapy for LTBI in accordance with references (a), (h), and (j). The "Clinical Flowchart for the Evaluation and Treatment of Latent TB Infection", enclosure (6), shall be utilized.

(2) The preferred treatment for LTBI is Isoniazid (INH) 300 mg daily for 9 months for adults, and 10-15 mg/kg/day in 1-2 divided doses (maximum 300 mg/day) for 9 months for infants and children. If INH is contraindicated, Rifampin 600 mg daily for 4 months is considered an alternate regimen for both adults and children.

(3) Contraindications to INH include previous history of INH-associated liver injury, history of severe adverse reaction to INH, or acute (not chronic) liver disease of any etiology. A history of BCG vaccination should not influence the decision whether to treat latent TB infection.

(4) Management and treatment of a pregnant patient with LTBI (or active disease) should be performed in consultation with the patient's obstetrician.

(5) Patients should be counseled to seek prompt medical attention and stop treatment for LTBI if symptoms of an adverse reaction to medication develop. The most severe adverse reaction to INH is hepatitis. Other side effects associated with INH include rashes, peripheral neuropathy, and mild central nervous system effects. Patients must be advised to refrain from alcohol consumption during therapy, as alcohol may increase INH toxicity.

(6) Children and patients who are elderly, pregnant or breastfeeding, have seizure disorders, or have conditions that predispose to neuropathy (e.g. diabetes, uremia, alcoholism,

malnutrition, HIV infection) should be treated concomitantly with pyridoxine (vitamin B-6) 10-25 mg daily.

(7) INH should be discontinued if the transaminase levels exceed 3x normal (if symptomatic) or are greater than 5x normal (if asymptomatic).

(8) Patients on INH for LTBI must be advised to adhere to the 9-month daily dose regimen for most effective treatment. However, patients who miss doses during LTBI treatment do not need to restart the 9-month regimen if at least 180 doses of INH can be administered within a 9-month period, per reference (a).

f. Periodic Patient Evaluations

(1) Patients with a newly positive TST, or with a history of a positive TST and either unknown or inadequate treatment must be evaluated at least monthly by the Epidemiology Division and PCM/Occupational Medicine provider.

(2) Monthly evaluations during treatment for LTBI shall be documented on the "Periodic Evaluation for Patients Receiving Treatment for Latent Tuberculosis Infection (LTBI)" SF-600 overprint, enclosure (2).

(3) The evaluations shall include, but not be limited to, an assessment of the following:

- (a) Patient compliance with LTBI therapy;
- (b) Possible LTBI-induced liver toxicity;
- (c) Presence of active TB.

(4) Patients whose treatment includes pyrazinamide must be clinically monitored at weeks 2, 4, and 8.

(5) Patients shall be referred to their PCM or Occupational Medicine provider for suspected adverse drug reaction or active TB. If an adverse drug reaction is suspected, treatment must be discontinued until provider evaluation.

g. Annual Evaluations

(1) All patients with a positive TST who have completed treatment for LTBI, or those who have a history of positive TST (regardless of completion of LTBI treatment) must undergo annual

evaluations by the Epidemiology Division and PCM/Occupational Medicine provider.

(2) The follow-up evaluations shall focus on review of the signs and symptoms of active TB with the patient. Patients shall be referred to their PCM or Occupational Medicine provider for any question of active TB.

(3) Annual evaluations shall be documented on the "Annual Evaluation for Patients with a History of a Positive Tuberculin Skin Test (TST)" SF-600 overprint, enclosure (3). No additional TSTs or chest x-rays are required unless clinically indicated.

h. Management of Active TB

(1) Upon discovery of a suspected or confirmed case of active TB, the Infection Control Coordinator, the Preventive Medicine Department/Epidemiology Division, and the USNH Okinawa Pulmonologist shall be notified.

(2) All patients with suspected or confirmed active pulmonary TB shall be promptly isolated in a negative pressure room with airborne precautions. Patients shall wear surgical masks outside of a negative pressure room, per reference (f).

(3) All USNH Okinawa healthcare workers, when in the course of their duties could potentially be exposed to a suspected or confirmed case of active TB, will be provided and wear an approved disposable particulate respirator (e.g., N95 respirator) issued by the Safety Department.

(4) Visitors to rooms occupied by patients with suspected or confirmed TB should wear a particulate respirator (e.g., N95 respirator), per reference (f). When visitors are unable to wear a particulate respirator, the attending physician should be consulted. For visitors unable to wear a respirator who are permitted into the room, the patient will wear a surgical mask and visitors should minimize time spent in the room. All such visitors must be made aware that the surgical mask does not provide complete protection from airborne infectious particles.

(5) Investigation of contacts will be conducted and a Medical Event Report submitted for suspected or confirmed cases of active TB, as outlined above in the Responsibilities and Actions for the Preventive Medicine/Epidemiology Division.

(6) Cleaning of rooms occupied by patients with suspected or confirmed active TB requires no extra (non-routine)

measures for disinfection. However, changing or washing patient privacy curtains is recommended after patient discharge.



B. S. DAWSON

Distribution:
List I

HEALTH RECORD	CHRONOLOGICAL RECORD OF MEDICAL CARE		
DATE	SYMPTOMS, DIAGNOSIS, TREATMENT, TREATING ORGANIZATION <i>(Sign each entry)</i>		
	INITIAL EVALUATION FOR POSITIVE TUBERCULIN SKIN TEST (TST)		
	FOR THE PATIENT: <i>(Please circle the correct response)</i>		
ALLERGIES: YES NO	1. Have you ever had contact with a person diagnosed with active tuberculosis?	YES	NO UNKNOWN
IF YES, EXPLAIN:	2. Have you recently had a fever? (temperature greater than 100.4F)	YES	NO
	3. Have you had unusual sweating at night?	YES	NO
	4. Do you have unusual chronic fatigue?	YES	NO
TOBACCO USE: YES NO	5. Have you experienced recent, unexplained, weight loss?	YES	NO
	6. Have you had a cough for 3 or more weeks?	YES	NO
IF YES, WHAT TYPE?	7. Do you have unusual shortness of breath?	YES	NO
	8. Do you drink alcoholic beverage?	YES	NO
AMOUNT PER DAY:	9. Are you taking any medications? If yes, what are you taking? _____	YES	NO
	10. Do you have any chronic illnesses or liver disease? If yes, what illness(es) do you have? _____	YES	NO
	11. Have you ever received BCG vaccine?	YES	NO UNSURE
	12. Have you had a prior PPD reaction?	YES	NO
	13. Have you lived or traveled outside of the United States since your last PPD?	YES	NO
	If Yes, where did you live or travel and on what dates? _____		
	14. In what country were you born? _____		
	FEMALES ONLY:		
	1. Are you or could you be pregnant?	YES	NO UNSURE
	2. Have you had a baby within the last 3 months?	YES	NO
	3. Are you nursing?	YES	NO
	4. Are you using birth control?	YES	NO
	If yes, what method of birth control? _____		

HOSPITAL OR MEDICAL FACILITY	STATUS	DEPART./SERVICE	RECORDS MAINTAINED AT
SPONSOR'S NAME	SSN/ID NO.	RELATIONSHIP TO SPONSOR	
PATIENT'S IDENTIFICATION: <i>(For typed or written entries, give: Name -- last, first, middle; ID No or SSN; Sex; Date of Birth; Rank/Grade.)</i>		REGISTER NO.	WARD NO.

CHRONOLOGICAL RECORD OF MEDICAL CARE
Medical Record

STANDARD FORM 600 (REV. 6-97)
Prescribed by GSA/ICMR
FIRM (41 CFR) 201-9.202
OVERPRINT FOR BUMEDINST 6224.8

HEALTH RECORD	CHRONOLOGICAL RECORD OF MEDICAL CARE
DATE	SYMPTOMS, DIAGNOSIS, TREATMENT, TREATING ORGANIZATION <i>(Sign each entry)</i>
FOR THE PROVIDER:	
S: Patient is a _____ year old (White/Black/Asian-Pacific/Other), (Male/Female), who reacted to a T.U. TST administered on _____ with an induration of _____ mm, read on _____.	
O: Temp: _____ Pulse: _____ BP: _____ Weight: _____	
Lungs: _____ Abdomen: _____	
Other: _____	
A: <i>(Check all that apply)</i>	
Latent Tuberculosis Infection (LTBI), with new positive TST.	
LTBI, with history of positive TST and no prior treatment or incomplete treatment.	
Other: _____	
P: <i>(Check all the apply)</i> (INH daily for 9 months is the preferred therapy, however, 6 months of this regimen may be suitable, if daily therapy can be ensured)	
INH 300 mg (#30) 1 tablet daily by mouth (_____ with Vitamin B6 50 mg, #30) for _____ months.	
Follow-up in _____ weeks or sooner if indicated.	
Other: _____	
COUNSELING INFORMATION	
<i>(To be read and signed by the patient to indicate that the following information is clearly understood)</i>	
I have been counseled and I understand the following: My positive tuberculosis skin test means I have been infected with tuberculosis bacteria. I could develop tuberculosis from this infection. Signs and symptoms of active disease include fever, night sweats, weight loss, and coughing up blood. I should report to sick call immediately if I develop any of these signs or symptoms. The drug isoniazid (INH) helps to kill the tuberculosis bacteria, and is taken every day for _____ months. It is essential that the drug be taken regularly. Monthly medical evaluations are required while taking INH. Sometimes INH can cause an inflammation of the liver that usually goes away when the medication is stopped. I will report to sick call immediately if I develop nausea, vomiting, abdominal pain, or a yellow tint to my skin or the whites of my eyes. I understand that drinking alcohol can also cause hepatitis and that I am not to drink alcoholic beverages while I am taking INH.	
Patient Signature _____	Date _____
Provider Signature _____	Date _____

HEALTH RECORD	CHRONOLOGICAL RECORD OF MEDICAL CARE		
DATE	SYMPTOMS, DIAGNOSIS, TREATMENT, TREATING ORGANIZATION <i>(Sign each entry)</i>		
	PERIODIC EVALUATION FOR PATIENTS RECEIVING TREATMENT FOR		
	LATENT TUBERCULOSIS INFECTION (LTBI)		
ALLERGIES: YES NO	FOR THE PATIENT: (Please answer the questions below)		
IF YES, EXPLAIN:	1. What medications have you been taking for Latent Tuberculosis Infection (LTBI), and how long have you taken the medication? _____		
	2. How many days in the past month (if any) did you miss taking your medication? _____		
TOBACCO USE: YES NO	Since my <i>last evaluation</i> I have experienced:		
IF YES, WHAT TYPE?	3. Persistent (chronic) cough	YES	NO
AMOUNT PER DAY:	4. Coughing up blood	YES	NO
	5. Any unexplained fever	YES	NO
	6. Unexplained weight loss	YES	NO
	7. Night sweats	YES	NO
	8. Nausea, vomiting, diarrhea	YES	NO
	9. Yellow-looking skin or eyes	YES	NO
	10. Dark colored urine	YES	NO
	11. Unexpected muscle or joint pain	YES	NO
	12. Feeling run down or excessively tired	YES	NO
	13. Burning or tingling in my hand or feet	YES	NO
	14. Bleeding that did not stop as usual	YES	NO
	15. Problems with my medications	YES	NO
	FEMALES ONLY:		
	16. Are you or could you be pregnant?	YES	NO UNSURE

HOSPITAL OR MEDICAL FACILITY	STATUS	DEPART./SERVICE	RECORDS MAINTAINED AT
SPONSOR'S NAME	SSN/ID NO.	RELATIONSHIP TO SPONSOR	
PATIENT'S IDENTIFICATION: <i>(For typed or written entries, give: Name – last, first, middle; ID No or SSN; Sex; Date of Birth; Rank/Grade.)</i>		REGISTER NO.	WARD NO.

CHRONOLOGICAL RECORD OF MEDICAL CARE
 Medical Record
STANDARD FORM 600 (REV. 6-97)
Prescribed by GSA/JCMR
 FIRM (41 CFR) 201-9.202
OVERPRINT FOR BUMEDINST 6224.8

HEALTH RECORD	CHRONOLOGICAL RECORD OF MEDICAL CARE
DATE	SYMPTOMS, DIAGNOSIS, TREATMENT, TREATING ORGANIZATION <i>(Sign each entry)</i>
	FOR THE PROVIDER:
	S: Patient is a _____ year old (White/Black/Asian-Pacific/Other), (Male/Female), who reacted to a _____ T.U. TST administered on _____ with an induration of _____ mm, who completed treatment for Latent Tuberculosis Infection on _____.
	O: Temp: _____ Pulse: _____ BP: _____ Weight: _____
	Lungs: _____
	Abdomen: _____
	Other: _____
	A: <i>(Check all that apply)</i>
	_____ Patient has no symptoms or complaints of active tuberculosis.
	_____ Patient is complaining of signs or symptoms that require further evaluation .
	_____ Other:
	P: <i>(Check all the apply)</i>
	_____ Patient is directed to report to the clinic in one year for annual evaluation.
	_____ Patient is directed to report to the clinic sooner if signs or symptoms of active disease occur.
	_____ Other:
	Provider Signature _____ Date _____

TUBERCULOSIS RISK ASSESSMENT
U.S. Naval Hospital Okinawa and Branch Medical Clinics

Treatment Facility: _____ **Date of Assessment:** _____
Point of Contact (POC): _____
POC Telephone # and E-mail Address: _____

Incidence of Tuberculosis (TB)

What is the incidence of TB in your healthcare facility during the previous year, and how does it compare with the incidence of TB in Okinawa? Incidence is the number of new disease cases during a specified time period in a population at risk for developing the disease. Information on TB incidence in Okinawa can be obtained from the Public Health Specialist, Directorate of Public Health Services.	Facility TB cases: _____ (# new cases last year) Facility TB Incidence: _____ (Facility TB cases ÷ Total facility patient population) Okinawa TB Incidence: _____														
Does your facility treat patients with suspected or confirmed TB disease (inpatient or outpatient)?	Yes No														
If yes, how many are treated in facility in a calendar year? Review laboratory data, infection control records, and databases containing discharge diagnoses for this information.	<table border="1"> <thead> <tr> <th rowspan="2">Year</th> <th colspan="2"># of Patients</th> </tr> <tr> <th>Suspected</th> <th>Confirmed</th> </tr> </thead> <tbody> <tr> <td>1 year ago</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>2 years ago</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>5 years ago</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table>	Year	# of Patients		Suspected	Confirmed	1 year ago	_____	_____	2 years ago	_____	_____	5 years ago	_____	_____
Year	# of Patients														
	Suspected	Confirmed													
1 year ago	_____	_____													
2 years ago	_____	_____													
5 years ago	_____	_____													
If no, does your facility have a plan for the triage of patients with suspected or confirmed TB disease?	Yes No														
Has your facility had a cluster of suspected or confirmed TB disease in the past year (2 or more cases in a 3 month period)?	Yes No														
Is there evidence of person-to-person (e.g., patient-to-patient, patient-to-healthcare worker (HCW), HCW-to-patient, or HCW-to-HCW) transmission at your facility? Use information from case reports. Determine if any tuberculin skin test (TST) conversions have occurred among HCWs.	Yes No														
Is there evidence of ongoing or unresolved healthcare-associated TB transmission in your facility (based on case reports)?	Yes No														
Are there immunocompromised patients or HCWs in your facility?	Yes No														
Have patients with drug-resistant TB disease been encountered in your facility within the previous 5 years?	Yes No If yes, year(s) encountered: _____														
When was the first time a risk assessment was done for your facility?	Date _____														

Risk classification for Outpatient Setting

How many patients with TB disease are encountered in your outpatient setting in a calendar year? Review laboratory data, infection control records, and databases containing discharge diagnoses for this information.	<table border="1"> <thead> <tr> <th>Year</th> <th># of Patients</th> </tr> </thead> <tbody> <tr> <td>1 year ago</td> <td>_____</td> </tr> <tr> <td>2 years ago</td> <td>_____</td> </tr> <tr> <td>5 years ago</td> <td>_____</td> </tr> </tbody> </table>	Year	# of Patients	1 year ago	_____	2 years ago	_____	5 years ago	_____
Year	# of Patients								
1 year ago	_____								
2 years ago	_____								
5 years ago	_____								
Depending on the number of TB patients seen on an outpatient basis in a given year, what is the risk classification for your outpatient setting? (see Table 1)	<input type="checkbox"/> Low Risk <input type="checkbox"/> Medium Risk <input type="checkbox"/> Potential ongoing transmission								

Risk Classification for Inpatient Setting

Not Applicable

How many inpatient beds are in your inpatient setting?	Quantity _____								
How many patients with TB disease are encountered in your inpatient setting in a calendar year? Review laboratory data, infection control records, and databases containing discharge diagnoses for this information.	<table border="1"> <thead> <tr> <th>Year</th> <th># of Patients</th> </tr> </thead> <tbody> <tr> <td>1 year ago</td> <td>_____</td> </tr> <tr> <td>2 years ago</td> <td>_____</td> </tr> <tr> <td>5 years ago</td> <td>_____</td> </tr> </tbody> </table>	Year	# of Patients	1 year ago	_____	2 years ago	_____	5 years ago	_____
Year	# of Patients								
1 year ago	_____								
2 years ago	_____								
5 years ago	_____								
Depending on the number of beds and TB patients encountered in a given year, what is the risk classification for your inpatient setting? (see Table 1)	<input type="checkbox"/> Low Risk <input type="checkbox"/> Medium Risk <input type="checkbox"/> Potential ongoing transmission								
Does your facility have a plan for triaging patients with suspected or confirmed TB disease?	<table border="1"> <thead> <tr> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>_____</td> </tr> </tbody> </table>	Yes	No	_____	_____				
Yes	No								
_____	_____								

Screening of HCWs for *M. tuberculosis* Infection

Are the HCWs in your healthcare facility enrolled in a TB screening program?	<table border="1"> <thead> <tr> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>_____</td> </tr> </tbody> </table>	Yes	No	_____	_____																				
Yes	No																								
_____	_____																								
<p>If yes, which HCWs in your facility are included in the TB screening program? (check all that apply)</p> <table border="0"> <tr> <td><input type="checkbox"/> Physicians</td> <td><input type="checkbox"/> Construction or renovation workers</td> </tr> <tr> <td><input type="checkbox"/> Mid-level practitioners (nurse practitioners, physician's assistants)</td> <td><input type="checkbox"/> Service workers</td> </tr> <tr> <td><input type="checkbox"/> Nurses</td> <td><input type="checkbox"/> Janitorial staff</td> </tr> <tr> <td><input type="checkbox"/> Corpsman/Technicians</td> <td><input type="checkbox"/> Maintenance or engineering staff</td> </tr> <tr> <td><input type="checkbox"/> Administrators</td> <td><input type="checkbox"/> Transportation staff</td> </tr> <tr> <td><input type="checkbox"/> Laboratory workers</td> <td><input type="checkbox"/> Dietary staff</td> </tr> <tr> <td><input type="checkbox"/> Respiratory therapists</td> <td><input type="checkbox"/> Receptionists</td> </tr> <tr> <td><input type="checkbox"/> Physical therapists</td> <td><input type="checkbox"/> Trainees and students</td> </tr> <tr> <td><input type="checkbox"/> Contract staff</td> <td><input type="checkbox"/> Volunteers</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Others (specify) _____</td> </tr> </table>		<input type="checkbox"/> Physicians	<input type="checkbox"/> Construction or renovation workers	<input type="checkbox"/> Mid-level practitioners (nurse practitioners, physician's assistants)	<input type="checkbox"/> Service workers	<input type="checkbox"/> Nurses	<input type="checkbox"/> Janitorial staff	<input type="checkbox"/> Corpsman/Technicians	<input type="checkbox"/> Maintenance or engineering staff	<input type="checkbox"/> Administrators	<input type="checkbox"/> Transportation staff	<input type="checkbox"/> Laboratory workers	<input type="checkbox"/> Dietary staff	<input type="checkbox"/> Respiratory therapists	<input type="checkbox"/> Receptionists	<input type="checkbox"/> Physical therapists	<input type="checkbox"/> Trainees and students	<input type="checkbox"/> Contract staff	<input type="checkbox"/> Volunteers		<input type="checkbox"/> Others (specify) _____				
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Is baseline skin testing performed with two-step TST for HCWs?	<table border="1"> <thead> <tr> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>_____</td> </tr> </tbody> </table>	Yes	No	_____	_____																				
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_____	_____																								
How frequently are eligible HCWs tested for <i>M. tuberculosis</i> infection?	Frequency _____																								
Are <i>M. tuberculosis</i> infection test records maintained for HCWs?	<table border="1"> <thead> <tr> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>_____</td> </tr> </tbody> </table>	Yes	No	_____	_____																				
Yes	No																								
_____	_____																								
If yes, where are the <i>M. tuberculosis</i> infection test records for HCWs maintained?	Location _____																								
If yes, who maintains the <i>M. tuberculosis</i> infection test records for HCWs?	Name _____																								
<p>If a serial TB screening program for HCWs to test for <i>M. tuberculosis</i> infection exists, what is the TST conversion rate for your HCWs in a given year? TST conversion rate is calculated by dividing the number of conversions among HCWs by the number of HCWs who were tested during a specified time period.</p>	<table border="1"> <thead> <tr> <th></th> <th># of TST Conversions</th> <th># of HCWs Tested</th> <th>Conversion Rate</th> </tr> </thead> <tbody> <tr> <td>1 year ago</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>2 years ago</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>3 years ago</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>4 years ago</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>5 years ago</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table>		# of TST Conversions	# of HCWs Tested	Conversion Rate	1 year ago	_____	_____	_____	2 years ago	_____	_____	_____	3 years ago	_____	_____	_____	4 years ago	_____	_____	_____	5 years ago	_____	_____	_____
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	3 years ago	_____	_____	_____																					
	4 years ago	_____	_____	_____																					
5 years ago	_____	_____	_____																						
Has the <i>M. tuberculosis</i> infection test conversion rate been increasing or decreasing, or has it remained the same over the past five years? (check one)	<input type="checkbox"/> Increasing <input type="checkbox"/> Decreasing <input type="checkbox"/> No Change																								

Screening of HCWs for *M. tuberculosis* Infection (continued)

Do any areas of the healthcare facility (e.g., specific clinical areas) or any group of HCWs (e.g., laboratory workers, emergency department staff, respiratory therapists, staff attending bronchoscopies) have a TST conversion rate for <i>M. tuberculosis</i> infection that exceeds the facility's annual average? If yes, list.	Clinical Areas or <u>HCW group</u>	TST Conversion <u>Rate</u>
	_____	_____
	_____	_____
Are HCWs with positive TSTs who transfer from your facility provided instructions to follow-up for latent tuberculosis treatment and/or annual TB screening?	Yes	No
		Not applicable (NA)

TB Infection Control Program

Does your healthcare facility have a site-specific written TB infection control plan?	Yes	No
If yes, when was the TB exposure control plan first written?	Date _____	
If yes, when was the clinic specific TB infection control plan last reviewed or updated?	Date _____	
If yes, does the written TB infection control plan need to be updated based on timing of last update (i.e., >1 year, changing TB epidemiology of the community or facility, the occurrence of a TB outbreak, change in higher authority TB policy, or other factors related to a change in risk for transmission of <i>M. tuberculosis</i>)?	Yes	No
Is there an infection control representative at your facility?	Yes	No
Is there a TB exposure control representative at your facility?	Yes	No
Does your facility have an infection control committee or a committee with infection-control responsibilities?	Yes	No
If yes, which groups are represented on the committee? (check all that apply)		
<input type="checkbox"/> Physicians <input type="checkbox"/> Safety staff <input type="checkbox"/> Nurses <input type="checkbox"/> Administrators <input type="checkbox"/> Epidemiologists <input type="checkbox"/> Risk Assessment personnel <input type="checkbox"/> Engineers <input type="checkbox"/> Quality control personnel <input type="checkbox"/> Pharmacists <input type="checkbox"/> Others (specify) _____ <input type="checkbox"/> Laboratory personnel		
If your facility does <i>not</i> have an infection control committee, what committee is responsibility for infection control at your facility?	Committee _____	

Implementation of a Site-specific TB Infection Control Plan

Has a person been designated to be responsible for implementing the infection control plan in your healthcare facility?	Yes	No
If yes, who?	Name _____ Title _____	
Has a person been designated to be responsible for implementing the TB exposure control plan in your facility?	Yes	No
If yes, who?	Name _____ Title _____	

Implementation of a Site-Specific TB Infection Control Plan (continued)

<p>Based on a review of the medical records of a sample of patients with TB disease at your facility, what is the average number of days for the following:</p> <p>_____ Presentation of patient until collection of specimen.</p> <p>_____ Specimen collection until receipt by laboratory.</p> <p>_____ Receipt of specimen by laboratory until smear results are provided to healthcare provider.</p> <p>_____ Diagnosis until initiation of standard antituberculosis treatment.</p> <p>_____ Receipt of specimen by laboratory until culture results are provided to healthcare provider.</p> <p>_____ Receipt of specimen by laboratory until drug-susceptibility results are provided to healthcare provider.</p> <p>_____ Receipt of drug-susceptibility results until adjustment of antituberculosis treatment, if indicated.</p> <p>_____ Admission of patient to hospital until placement in airborne infection isolation.</p>	
<p>Based on a review of the medical records of a sample of patients with TB disease, are patients who have suspected or confirmed infectious TB disease detected and placed on airborne precautions promptly?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not applicable (no one has presented to our healthcare facility with suspected or confirmed TB)</p>
<p>Through what standard means (e.g., review of TST conversion rates, patient medical records, periodic inspections or site surveys) are lapses in infection control recognized?</p>	<p>Means _____</p> <p>_____</p>
<p>What mechanisms are in place to correct lapses in infection control?</p>	<p>Mechanisms _____</p> <p>_____</p>
<p>Is ongoing training and education on TB infection control practices provided to HCWs at your facility?</p>	<p>Yes No</p>

Laboratory Processing of TB-Related Specimens, Tests, and Results

<p>Based on laboratory review, which of the following tests are either conducted in-house at your healthcare facility or sent out to a reference laboratory outside of Okinawa? (check all that apply)</p>																			
<table border="0"> <tr> <td><u>In-house</u></td> <td><u>Sent out</u></td> <td></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Acid-fast bacilli (AFB) smears</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Culture using liquid media (e.g., Bactec and MB-BacT)</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Culture using solid media</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Drug-susceptibility testing</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Nucleic acid amplification testing</td> </tr> </table>	<u>In-house</u>	<u>Sent out</u>		<input type="checkbox"/>	<input type="checkbox"/>	Acid-fast bacilli (AFB) smears	<input type="checkbox"/>	<input type="checkbox"/>	Culture using liquid media (e.g., Bactec and MB-BacT)	<input type="checkbox"/>	<input type="checkbox"/>	Culture using solid media	<input type="checkbox"/>	<input type="checkbox"/>	Drug-susceptibility testing	<input type="checkbox"/>	<input type="checkbox"/>	Nucleic acid amplification testing	
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<input type="checkbox"/>	<input type="checkbox"/>	Nucleic acid amplification testing																	
<p>Does the laboratory at your healthcare facility or the reference laboratory used by your facility report AFB smear results for all patients within 24 hours of receipt of specimen?</p>	<p>Yes No</p>																		

Environmental Controls

<p>Which environmental controls are in place in your healthcare facility? (check all that apply)</p> <p><input type="checkbox"/> Negative-pressure rooms</p> <p><input type="checkbox"/> Local exhaust ventilation (enclosing devices and exterior devices)</p> <p><input type="checkbox"/> General ventilation (e.g., single-pass system, recirculation system.)</p> <p><input type="checkbox"/> Air-cleaning methods (e.g., high-efficiency particulate air [HEPA] filtration, ultraviolet germicidal irradiation [UVGI])</p> <p><input type="checkbox"/> Other (specify) _____</p>

Environmental Controls (continued)

What are the actual air changes per hour (ACH) for a sample of various rooms in your facility?

<u>Room</u>	<u>ACH</u>	<u>Room</u>	<u>ACH</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Which of the following local exterior or enclosing devices such as exhaust ventilation devices are used in your healthcare facility? (check all that apply)

- Laboratory hoods
- Booths for sputum induction
- Tents or hoods for enclosing patients or procedures
- Other (specify) _____

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 (specify) _____

What air-cleaning methods are used in your healthcare facility?

<u>HEPA filtration</u>	<u>UVGI</u>
<input type="checkbox"/> Fixed room-air recirculation systems	<input type="checkbox"/> Duct irradiation
<input type="checkbox"/> Portable room-air recirculation systems	<input type="checkbox"/> Upper-air irradiation
	<input type="checkbox"/> Portable room-air cleaners

How many negative-pressure rooms are in your healthcare facility? Quantity _____

What ventilation methods are used for negative-pressure rooms? (check all that apply)

- Not applicable (Our facility does not have a negative-pressure room)
- Primary (general ventilation)
 - Single-pass heating, ventilating, and air conditioning (HVAC)
 - Recirculating HVAC systems
- Secondary (methods to increase equivalent ACH)
 - Fixed room-air recirculation systems
 - HEPA filtration
 - UVGI
 - Other (specify) _____

Does your healthcare facility have access to or collaborate with an environmental engineer or 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? Obtain information from Industrial Hygiene Department.	Yes	No
Is the directional airflow in negative-pressure rooms checked daily when in use with smoke tubes or visual checks?	Yes	No NA
Are the results of environmental control checks readily available?	Yes	No

Environmental Controls (continued)

What procedures are in place if pressure in your negative-pressure room is not negative? _____			

Do your negative-pressure rooms meet the recommended pressure differential of 0.01-inch water column negative to surrounding structures?	Yes	No	NA

Respiratory Protection Program

Are the HCWs in your healthcare facility enrolled in a respiratory protection program?	Yes	No		
If yes , which HCWs in your facility are included in the respiratory protection program? (<i>check all that apply</i>)				
<table style="width:100%; border:none;"> <tr> <td style="width:50%; vertical-align:top;"> <input type="checkbox"/> Physicians <input type="checkbox"/> Mid-level practitioners (nurse practitioners, physician's assistants) <input type="checkbox"/> Nurses <input type="checkbox"/> Corpsman/Technicians <input type="checkbox"/> Administrators <input type="checkbox"/> Laboratory workers <input type="checkbox"/> Respiratory therapists <input type="checkbox"/> Physical therapists <input type="checkbox"/> Contract staff </td> <td style="width:50%; vertical-align:top;"> <input type="checkbox"/> Construction or renovation workers <input type="checkbox"/> Service workers <input type="checkbox"/> Janitorial staff <input type="checkbox"/> Maintenance or engineering staff <input type="checkbox"/> Transportation staff <input type="checkbox"/> Dietary staff <input type="checkbox"/> Receptionists <input type="checkbox"/> Trainees and students <input type="checkbox"/> Volunteers <input type="checkbox"/> Others (<i>specify</i>) _____ </td> </tr> </table>			<input type="checkbox"/> Physicians <input type="checkbox"/> Mid-level practitioners (nurse practitioners, physician's assistants) <input type="checkbox"/> Nurses <input type="checkbox"/> Corpsman/Technicians <input type="checkbox"/> Administrators <input type="checkbox"/> Laboratory workers <input type="checkbox"/> Respiratory therapists <input type="checkbox"/> Physical therapists <input type="checkbox"/> Contract staff	<input type="checkbox"/> Construction or renovation workers <input type="checkbox"/> Service workers <input type="checkbox"/> Janitorial staff <input type="checkbox"/> Maintenance or engineering staff <input type="checkbox"/> Transportation staff <input type="checkbox"/> Dietary staff <input type="checkbox"/> Receptionists <input type="checkbox"/> Trainees and students <input type="checkbox"/> Volunteers <input type="checkbox"/> Others (<i>specify</i>) _____
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Are respirators used in your facility for HCWs working with TB patients?	Yes	No		
If yes , include manufacturer, model, and specific application:				
<u>Manufacturer</u>	<u>Model</u>	<u>Specific application</u>		
_____	_____	_____		
_____	_____	_____		
_____	_____	_____		
_____	_____	_____		
Is annual respiratory protection training for HCWs performed by a person with advanced training in respiratory protection?	Yes	No		
Does your healthcare facility provide <i>initial</i> fit testing for HCWs?	Yes	No		
If yes , when is it conducted? _____				
Does your healthcare facility provide <i>periodic</i> fit testing for HCWs?	Yes	No		
If yes , how frequently is it conducted? _____				
What method of fit testing is used? (<i>describe</i>) _____				

Is qualitative fit testing used?	Yes	No		
Is quantitative fit testing used?	Yes	No		

Reassessment of TB Risk

How frequently is the TB risk assessment conducted or updated in your healthcare facility?	Frequency _____
When was the last TB risk assessment conducted?	Date _____
What problems were identified at the previous TB risk assessment?	
1. _____	
2. _____	
3. _____	
4. _____	
5. _____	
What actions were taken to control the problems identified at the last TB risk assessment?	
1. _____	
2. _____	
3. _____	
4. _____	
5. _____	
Did the risk classification need to be revised as a result of the last TB risk assessment?	Yes No

Based on this TB risk assessment, our healthcare facility is considered (per Table 1):

- Low Risk
- Medium Risk
- Potential ongoing transmission

Additional Comments: _____

Report submitted by: _____
 (Name, Rate/Rank, Title)

 (Signature) **Date:** _____

TABLE 2 Risk Classifications for Healthcare Facilities and Recommended Frequency of Screening for *M. tuberculosis* Infection among HCWs

Setting Type	Risk Classification		
	<i>Low risk</i>	<i>Medium risk</i>	<i>Potential ongoing transmission</i>
Inpatient < 200 Beds	<3 TB patients/year	≥3 TB patients/year	• Evidence of ongoing <i>M. tuberculosis</i> transmission, regardless of setting
Inpatient ≥ 200 beds	<6 TB patients/year	≥6 TB patients/year	
Outpatient settings and Non-traditional facility-based settings	<3 TB patients/year	≥3 TB patients/year	
TB treatment facilities	Settings where <ul style="list-style-type: none"> • Persons who will be treated have been demonstrated to have LTBI and not TB disease, • No cough-inducing procedures are performed, and • A system is in place to promptly detect and triage persons who have signs or symptoms of TB disease to a setting where persons with TB disease are treated 	<ul style="list-style-type: none"> • Settings where persons with TB disease are encountered • Settings that do not otherwise meet the criteria for <i>low risk</i> 	
Laboratories	• Laboratories where clinical specimens that might contain <i>M. tuberculosis</i> are not manipulated	• Laboratories where clinical specimens that might contain <i>M. tuberculosis</i> are manipulated	
Recommendations for Screening Frequency			
Baseline two-step TST	Yes, for all HCWs upon hire	Yes, for all HCWs upon hire	Yes, for all HCWs upon hire
TST for HCWs upon unprotected exposure to <i>M. tuberculosis</i>	Perform a contact investigation, i.e., administer one TST as soon as possible at the time of exposure, and if the TST result is negative, place another TST 8–10 weeks after the end of exposure to <i>M. tuberculosis</i> .		
Serial TST screening of HCWs	Every 12 months	Every 12 months	As needed in the investigation of potential ongoing transmission.

TABLE 1 CRITERIA FOR DETERMINING A POSITIVE TUBERCULIN SKIN TEST REACTION*

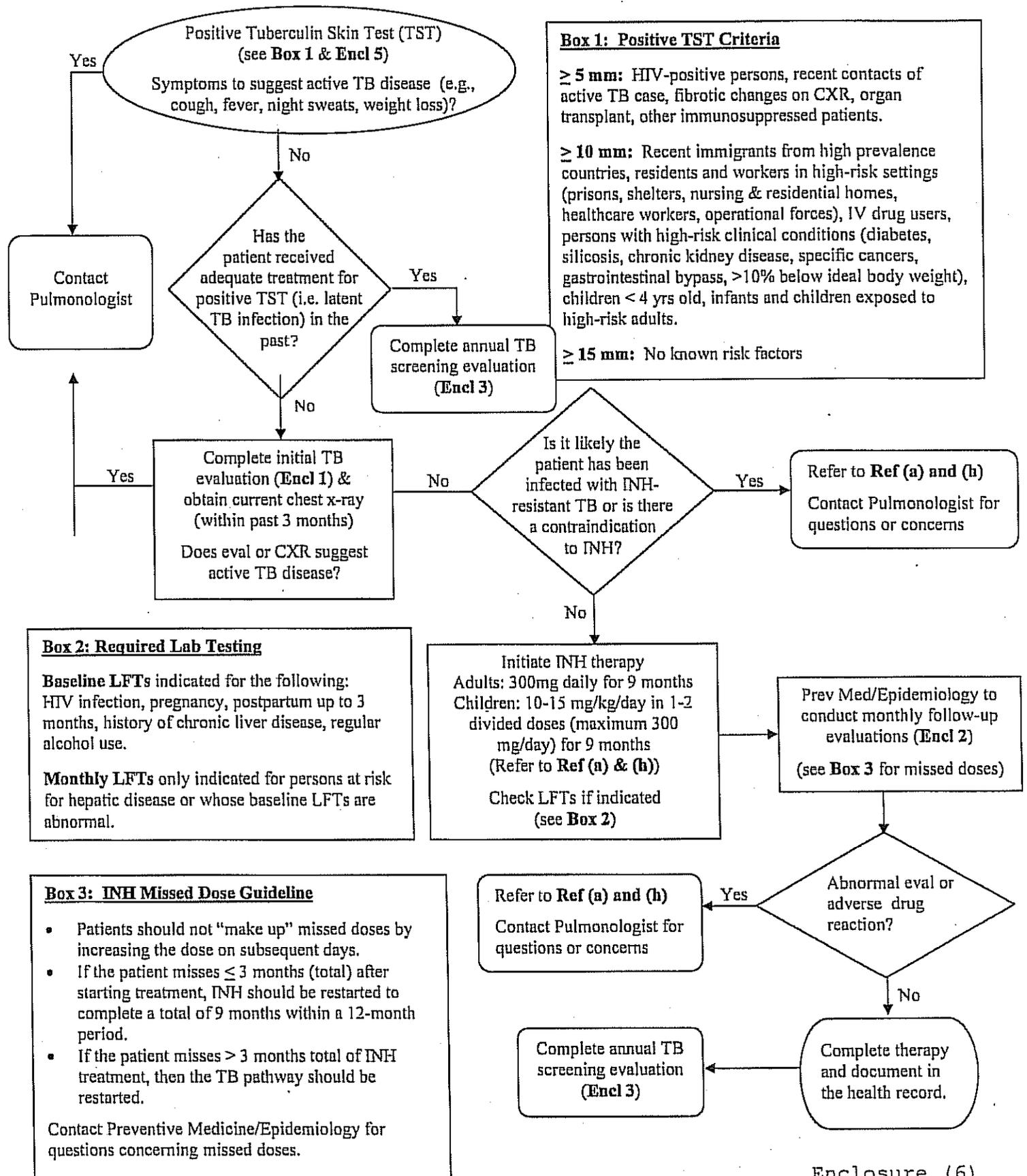
Reaction \geq 5 mm of Induration	Reaction \geq 10 mm of Induration	Reaction \geq 15 mm of Induration
<ul style="list-style-type: none"> ❖ Human immunodeficiency virus (HIV) positive persons ❖ Recent contacts of tuberculosis (TB) case patients ❖ Fibrotic changes on chest radiograph consistent with prior TB ❖ Patients with organ transplants ❖ Other immunosuppressed patients (receiving the equivalent of >15 mg/day of prednisone for one month or more) 	<ul style="list-style-type: none"> ❖ Recent immigrants (i.e., within 5 years) from high prevalence countries†. ❖ Injection drug users ❖ Residents and employees‡ of the following high-risk congregate settings: <ul style="list-style-type: none"> • Prisons and jails • Nursing homes and other long-term facilities for the elderly • Hospitals and other health care facilities • Residential facilities for patients with acquired immunodeficiency syndrome (AIDS) • Homeless shelters • Shipboard • Deployable Navy and Marine Corps units ❖ Mycobacteriology laboratory personnel ❖ Persons with the following clinical conditions that place them at high risk: <ul style="list-style-type: none"> • Silicosis • Diabetes mellitus • Chronic kidney disease • Some hematologic disorders (e.g., leukemias and lymphomas) • Other specific malignancies (e.g., carcinoma of the head or neck and lung) • Weight loss of >10% of ideal body weight • Gastrectomy • Jejunioileal bypass ❖ Children younger than 4 years of age ❖ Infants, children, and adolescents exposed to adults at high-risk 	<ul style="list-style-type: none"> ❖ Persons with no risk factors for TB

* If the TST induration is 10 mm (or more) greater than a previous TST induration within the last 2 years, the TST is also considered positive.

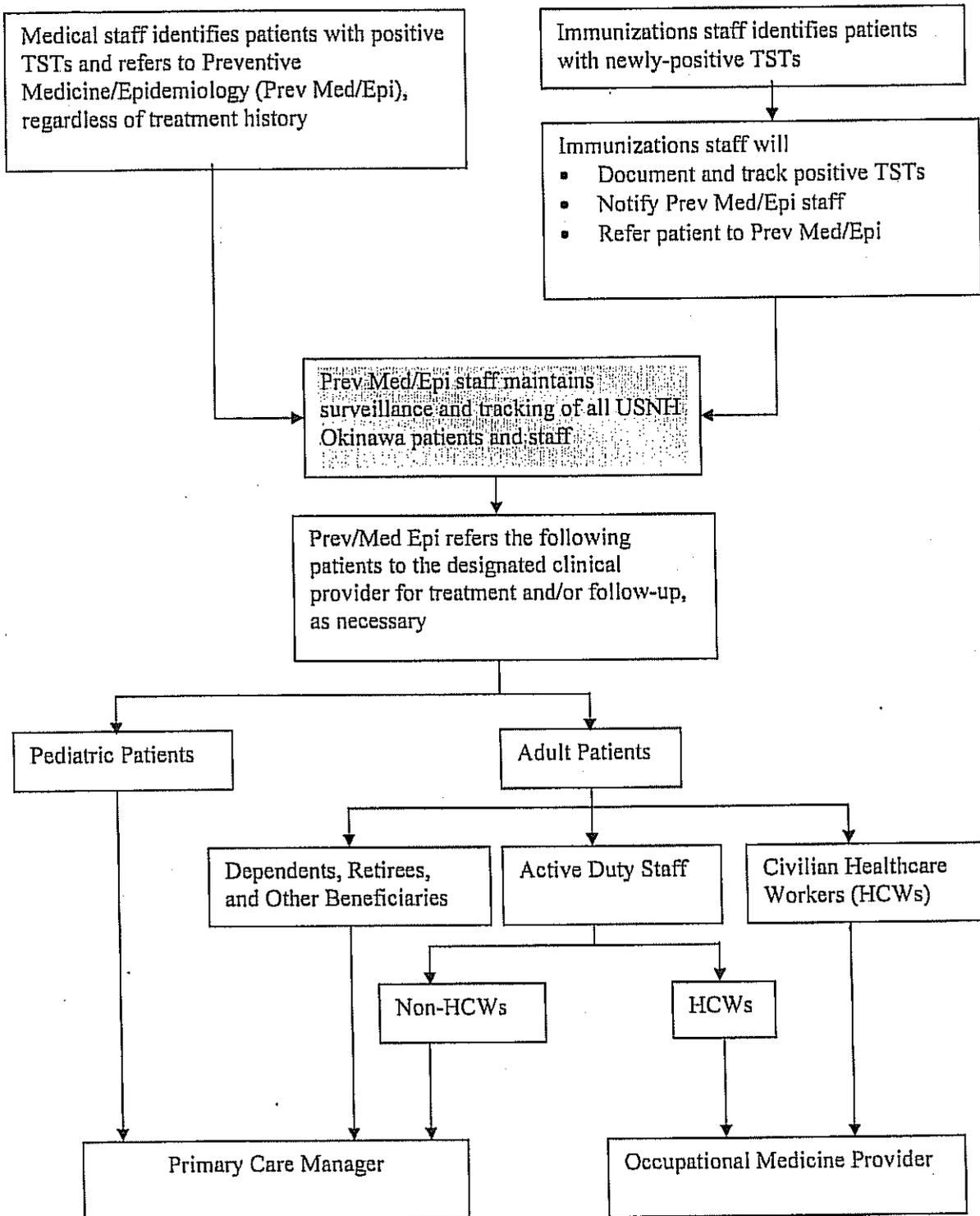
† Includes countries in Asia, Africa, Central and South America, and Eastern Europe.

‡ For persons who are otherwise at low risk and are tested at the start of employment, a reaction of \geq 15 mm in induration is considered positive.

Clinical Flowchart for the Evaluation and Treatment of Latent TB Infection



SURVEILLANCE FLOWCHART AND FOLLOW-UP RESPONSIBILITIES FOR POSITIVE TUBERCULIN SKIN TESTS (TSTs)



TUBERCULIN SKIN TEST CONSENT/COUNSELING FORM

Based upon risk factor screening, it has been determined that your child needs a tuberculin skin test to decide whether they have been exposed to bacteria that cause tuberculosis. This tuberculin skin test uses a small amount of Purified Protein Derivative (PPD) and is placed under the skin on the forearm. Since the tuberculin skin test uses a protein derivative and does not use live tuberculosis bacteria, it cannot cause the disease tuberculosis.

After the injection, there may be some localized swelling, redness, irritation and pain. It is very important that you do not scratch, rub or apply lotions or perfumes to the injection site. Your child will need to have the site examined by the Immunizations Clinic 48 to 72 hours after placement to determine if there is a reaction. The amount of swelling and your child's risk factors will determine whether the skin test result is positive.

The test is administered at the Immunizations Clinic on Mondays, Tuesdays, Wednesdays, and Fridays. If the test is negative, no further treatment is necessary. If the test is positive, your child will be referred to the Epidemiology Division for further evaluation and to your child's doctor to discuss treatment options. Usually, individuals are started on a medication called Isoniazid (INH) for 9 months. Upon completion of the INH regimen, only a brief follow up evaluation is needed annually.

In the majority of individuals with tuberculosis infection, the bacteria remains dormant; meaning it will not cause symptoms and cannot infect other people. If left untreated, however, the bacteria may become active. In this active state, symptoms such as fever, night sweats, unexplained weight loss, persistent cough, coughing up bloody phlegm, chest pain, and generalized fatigue may be experienced. Sometimes, people can have active tuberculosis and not realize it. Someone with an active case of tuberculosis is contagious and can unknowingly transmit the infection to other people, which is why treating the infection early is so important.

I have read the above information and agree to allow my child to get a tuberculin skin test to determine if they have been exposed to tuberculosis. I have read the above and have had all of my questions answered regarding the tuberculin skin test. Further questions regarding skin testing and tuberculosis can be addressed to your child's doctor, the Immunizations Clinic (phone 643-7441), or the Preventive Medicine Department (phone 643-7808/7622).

Parent/Guardian Signature: _____ **Date:** _____

Healthcare Provider Signature & Stamp: _____ **Date:** _____

PATIENT'S IDENTIFICATION (Use this space for Mechanical Imprint)

RECORDS MAINTAINED AT:		
PATIENT'S NAME (Last, First, Middle Initial)		SEX
RELATIONSHIP TO SPONSOR	STATUS	RATE/RANK
SPONSOR'S NAME		ORGANIZATION
DEPT/SERVICE	SSN/IDENTIFICATION NO.	DATE OF BIRTH

ISONIAZID (INH) COUNSELING FORM

I have been informed that I had a tuberculin skin test reaction of _____ (size in mm) on _____ (date). I understand that I have been exposed to the bacteria that causes the disease, Tuberculosis, and that proper therapy consists, in most cases, of nine months of treatment with a drug known as Isoniazid (INH). I understand that INH is a very effective measure to prevent the development of active tuberculosis disease in a newly exposed person. Although this treatment will reduce the risk of active disease, it does not eliminate or provide immunity against future exposure(s). A person who has been exposed still needs to be appropriately evaluated periodically and informed about their current status and symptoms of tuberculosis. I have been counseled as to the side effects of INH and am aware of the risks associated with this drug, such as medication-induced hepatitis. Furthermore, I have been educated that the benefit of treatment outweighs the risk of developing active clinical tuberculosis. While I am on this treatment, I understand that the following side effects or indicators warrant evaluation by a health care provider:

- Dark or tea-colored urine
- Grayish stool color
- Yellowing of the eyes (icterus)
- Yellowing of the skin (jaundice)
- Persistent nausea or episodes of vomiting
- Burning sensations of the arms, hands, feet, or legs

In addition, I understand that consumption of alcohol while taking INH may significantly increase my risk for medication- induced hepatitis.

I have been instructed to take my medication as prescribed one tablet every _____ for _____ months. Furthermore, I will not share my medication with any other person and will follow up monthly with my healthcare provider for evaluation and refill of the INH prescription. I will notify my healthcare provider if I cannot follow up for any reason (such as transfer, leave, or separating from service), so that arrangements can be made to prevent interruption of my therapy.

I have read the above information and understand what I have been instructed to do and have received a copy of this form.

Patient/Parent/Guardian Signature: _____ **Date:** _____

Healthcare Provider Signature & Stamp: _____ **Date:** _____

PATIENT'S IDENTIFICATION <i>(Use this space for Mechanical Imprint)</i>	RECORDS MAINTAINED AT:		
	PATIENT'S NAME (Last, First, Middle Initial)		SEX
	RELATIONSHIP TO SPONSOR	STATUS	RATE/RANK
	SPONSOR'S NAME		ORGANIZATION
	DEPT/SERVICE	SSN/IDENTIFICATION NO.	DATE OF BIRTH

GLOSSARY

Healthcare Workers. All paid and unpaid persons working in healthcare settings who have the potential for exposure to *Mycobacterium tuberculosis*. This may include, but is not limited to, the following: physicians, nurses, technicians, corpsmen, dentists, dental workers, lab and morgue workers, emergency medical service personnel, students, part-time personnel, temporary staff not employed by the healthcare facility, and individuals not directly involved in patient care but are potentially at risk for occupational exposure to tuberculosis (e.g., volunteers, dieticians, housekeeping, maintenance personnel, and clerical staff).

Latent Tuberculosis Infection (LTBI). Non-contagious infection by *Mycobacterium tuberculosis* that has no symptoms or signs of active disease. Individuals with LTBI are at increased risk of developing active tuberculosis infection.

Mantoux Method. A tuberculin skin test using a syringe and needle to inject tuberculin purified protein derivative (PPD) intradermally, typically on the volar surface of the left forearm. Intermediate strength is 5 tuberculin units (5 TU), which is the common dosage.

Positive TST. A TST indicating a possible tuberculosis infection based on the size of the induration and the individual's risk category as defined in enclosure (5).

Purified Protein Derivative (PPD). A purified tuberculin preparation used for skin testing.

Treatment for Latent Tuberculosis Infection (LTBI). Drug treatment intended to prevent the development of active, contagious tuberculosis in people who have been infected with *Mycobacterium tuberculosis* bacteria.

Tuberculin Skin Test (TST). Refers to the Mantoux method of skin testing for tuberculosis as described in reference (a). This test is commonly, but incorrectly referred to as a "PPD". "PPD" is the substance used to perform the test.

Tuberculosis Disease. Clinically active disease with symptoms, signs, and radiographic or laboratory evidence of pulmonary or extrapulmonary TB. Pulmonary TB is the most common form of active disease and is of the most concern because of the risk of transmission to others by the airborne route.

Tuberculosis Infection. The condition where *Mycobacterium tuberculosis* has entered the body and has begun to multiply. This usually causes a positive tuberculin skin test. Approximately 5-10% of persons with a tuberculosis infection develop the active disease during their lifetime if they do not receive treatment for Latent Tuberculosis Infection (LTBI).