1.0 PURPOSE

The purpose of this policy is to establish guidelines for the screening, assessment, and treatment of Pulmonary Tuberculosis.

2.0 REFERENCES AND DEFINITIONS

.1 Reference

a. Hawaii Revised Statutes, Section 26-14.6, Department of Public Safety; and Section 353C-2, Director of Public Safety, Powers and Duties.


c. Department of Health and Human Services, Center for Disease Control and Prevention, Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health-Care Settings, 2005.


.2 Definitions

a. Tuberculosis: A chronic bacterial infection caused by Mycobacterium tuberculosis that is characterized by the formation of granulomas in infected tissues and by cell-mediated hypersensitivity. The usual site of disease is the lung, but other organs may be involved.

b. Anergic person: A person with diminished reactivity to specific antigens.

c. Latent Tuberculosis Infection (LTBI): the condition of having a positive skin test but a chest radiograph that does not show active disease and not having symptoms of active disease.
3.0 POLICY

.1 The Health Care Division Administrator or designee is responsible to assure the implementation of a Pulmonary Tuberculosis Control Program throughout the Health Care Division. The Clinical Section Administrator at each correctional facility shall be responsible to assure the implementation of the Pulmonary Tuberculosis Control Program at their respective facility.

.2 All inmates shall receive pulmonary tuberculosis skin testing or screening upon admission to a correctional facility.

.3 Inmates not meeting exception guidelines shall receive the Mantoux (PPD) TB skin test upon admission.

.4 Inmates meeting the exception criteria shall have a chest x-ray, if the last documented X-ray was greater than one (1) year ago.

.5 Inmates refusing a PPD or chest x-ray to rule out TB exposure shall be segregated from other inmates until testing is completed and a negative result is determined.

.6 Mantoux tests are repeated for all re-admissions, including out-of-state transfers, occurring more than three (3) months from the time of discharge, except for documented prior positive reactors.

.7 All inmates shall receive an annual documented TB skin test or symptom screening, if a positive reactor, while incarcerated.

.8 Inmates being released with positive skin test findings, positive TB symptoms or other indications of unconfirmed pulmonary TB shall be directed to the Department of Health for follow-up care. The DOH shall be notified of the release of the inmate and the circumstances of their medical condition for follow-up in the community.
4.0 PROCEDURES

.1 All inmates are screened on admission for the following symptoms of pulmonary tuberculosis (TB):

- cough of three or more week’s duration and/or the following symptoms
- pleuritic chest pain, hemoptysis, fever, chills, night sweats, loss of appetite, anorexia or weight loss.

.2 Inmates with symptoms suggestive of pulmonary TB shall be segregated and shall have a prompt medical evaluation including a Mantoux tuberculin skin test and/or chest X-ray. Known active cases of pulmonary tuberculosis are referred to the Department of Health and transferred to a community hospital for respiratory isolation and treatment.

.3 Inmates on intake claiming to have tested positive in the system will have their records reviewed to verify prior positive results and to determine if the inmate received treatment.
   a. Inmates with positive results not recorded in millimeters and having no documented treatment, or inmates with no documented prior positive results in their health records will have a PPD planted following the Two-Step Method. Upon a positive response the inmate will be referred for a chest x-ray.
   b. Inmates found to have received prior treatment in the system will have the treatment recorded on the Problem List identifying the date treatment was completed and shall be referred for a chest x-ray, if last document x-ray is greater than one year.
   c. Inmates claiming to have received non-verifiable prior treatment outside the system will have that documented on the Problem List as follows, "Inmate claims to have received TB treatment from (DOH or name of private provider) and the date it ended" and shall be referred for a chest x-ray, if last document x-ray is greater than one year.
.4 Mantoux (PPD) skin testing is performed on all inmates on the day of admission except under the following guidelines:

a. A documented history of a prior positive Mantoux test recorded in millimeters.

b. Inmate has known HIV or other immunocompromising conditions at intake.

c. A reported severe reaction to tuberculin.

d. A documented history of TB disease.

c. Inmate refuses PPD test.

.5 Inmates meeting the exception criteria shall have a chest x-ray, if the last documented X-ray was greater than one (1) year ago.

.6 Inmates refusing a PPD shall be counseled by nursing staff and if available, provider staff. A chest x-ray shall be offered if the inmate continues to refuse skin testing. Refusal forms shall be completed. The inmate shall be segregated from other inmates until testing is completed and negative findings are confirmed.

.7 Inmates providing anecdotal or undocumented positive PPD information shall have a PPD placed using the two-step method.

.8 Inmates having a history of receiving BCG vaccine shall receive a TB skin test.

.9 Pregnant women shall be skin tested for TB.

.10 Mantoux tests are repeated for all re-admissions using the following guidelines:

a. Inmates released or incarcerated out-of-state for less than three (3) months, shall have a PPD placed within three (3) months of the inmate's return to Hawaii or (3) months from the date of the last Mantoux test, whichever is sooner.

b. Inmates released or incarcerated out-of-state for three (3) or more months shall have a PPD placed on re-admission.
c. Inmates with no prior documented history of a positive PPD having alternative sentences such as weekend reporting shall be screened and tested on the first weekend day they are admitted and the PPD read on the day of discharge. Inmates with positive PPDs shall be responsible for presenting themselves to the appropriate agency, as specified by Health Care staff, for a chest X-ray. Inmates with questionable chest x-rays shall be referred to the Department of Health for follow-up.

.11 A dose of 0.1 milliliters of 5 tuberculin units of purified protein derivative (PPD) is injected intradermally on the anterior forearm. A pale discrete elevation (6-10 mm wheal) should occur indicating correct placement of the injection. In the event an incorrect placement occurs another injection can be immediately be placed a few centimeters away from the prior site.

.12 Results of are read at 48–72 hours and are measured and recorded in terms of millimeters of induration. Induration consists of any palpable, raised, hardened areas around the injection site and is read across the width of the forearm. Redness or bruising is not included as part of the measurement. All reactions even those that are negative, shall be recorded in (mm) of induration.

.13 The following mm of induration is indicative of a positive reaction:
   a. Reaction of ≥10 mm induration for the general population
   b. Reaction of ≥5 mm induration is considered a positive result in the following persons:
      1. Persons infected with HIV,
      2. Persons who are recent contacts of patients with TB disease,
      3. Persons with fibrotic changes on chest radiograph consistent with previous TB disease,
      4. Organ transplant recipients and patients with other immunocompromising conditions (e.g., persons receiving >15 mg/day of prednisone for >1 month) and
      5. Persons suspected of having TB disease.

.14 Inmates with a positive PPD test shall require immediate provider notification for an exam, if possible, and a chest x-ray order to be completed either at the facility or the nearest Department of Health community hospital or TB center. TB control measures shall be implemented.

.15 Inmates with chest x-ray or sputum findings consistent with pulmonary TB shall be transferred to a community hospital or TB facility. DOH shall be notified.
.16 Annually all inmates shall be either be skin tested or screened for TB
   a. Inmates with previous negative skin test shall be skin tested.

   b. Inmates with prior positive skin test findings or history of TB disease shall
      be assessed for the following symptoms of active pulmonary TB:
      Cough >= 3 weeks duration and of the following symptoms:
      1. Fever,
      2. Night sweats,
      3. Unintentional weigh loss > 10% of body weight,
      4. Hemoptysis or
      5. Malaise/fatigue.

.17 Any inmate having symptoms consistent with active pulmonary TB shall require
   immediate provider notification and exam, if possible, and the ordering of and
   scheduling for a chest x-ray. TB exposure control measures shall be
   implemented until the x-ray is completed and negative findings confirmed.

.18 Inmates with abnormal chest X-ray findings consistent with TB shall continue
   isolation and TB exposure control measures. Follow-up sputum testing shall be
   arranged. Report findings to DOH and consider their recommendations.

.19 Highly suspected or known active TB cases shall be transferred to a community
   hospital for respiratory isolation and treatment until the patient is no longer
   communicable.

.20 Inmates refusing to be annually tested or screened for TB:

   a. Inquire into the reason for the inmate’s refusal. Reassure and educate
      the inmate regarding the importance of TB screening, support and
      encourage the inmate to comply with testing.

   b. Inmates continuing to refuse testing are refer to a nurse practitioner
      or physician for consultation.

   c. Inmates continuing to refuse skin testing may be offered a chest x-ray.

   d. Inmates refusing a chest x-ray shall be segregated from other inmates until
      a chest x-ray is performed. Testing refusal forms shall be completed.
.21 TB exposure control measures consist of the following:

a. Contacting the watch commander regarding the required complete segregation of a possibly infectious patient from other inmates.

b. Housing of inmate in a negative pressure infirmary room, if available.

c. Posting of Airborne Isolation Sign on inmate cell door.

d. Assuring staff in direct contact with inmate have been fit tested and are using their N-95 respirators.

e. Issuing of a medical memo to security staff regarding inmate use of a surgical mask when transported outside of their cell. Provide surgical masks to security for this purpose.

f. Instructing security officers transporting the inmate in a vehicle to use N95 respirators and to allow outside air circulation in the vehicle.

g. Instructing the patient on infection control measures concerning coughing, disposing of tissues, hand washing and use of a surgical mask.

h. Investigating into the inmate’s contacts for PPD planting and follow-up exposure planning.

i. Notifying DOH and development of an exposure follow-up plan,

j. Notifying the Health Care Division Medical Director, and Clinical Services Branch Administrator of the possible infectious inmate.

k. Obtaining timely testing such as chest x-rays, sputum cultures.

l. Working with the DOH, arrange timely transfers of known active or highly suggestive pulmonary TB patients to a community hospital for isolation and treatment.

.22 TB control measures shall only be cancelled upon receipt of documented negative TB follow-up test findings.
.23 Inmates with confirmed active TB infection or inmates with a newly positive skin test or positive TB symptoms that may or will be released into the community prior to confirmation of active disease are given written instructions to follow-up with the DOH upon release. The DOH shall be notified of the inmate’s medical condition and release situation for community follow-up.

.24 All inmates having Latent TB (LTBI) a reactive/positive PPDs and no clinical indication of active disease shall be offered treatment under the following guidelines:

a. High-risk groups listed below with a skin reaction to the tuberculin skin test (TST) >=5 mm:
   1. HIV – infected persons,
   2. Recent contacts of a TB patient,
   3. Patients with fibrotic changes on chest x-ray consistent with previous TB disease
   4. Patients with a history of an organ transplant or other immunocompromising conditions that are receiving the equivalent of >= 15 mg/day of prednisone for >= 1 month.

b. Patients with LTBI and a TST result of >= 10 mm induration.

.25 The preferred treatment for LTBI is as follows:

a. 9 months of daily INH (300 mg) or (900 mg) twice weekly dosing both to be nurse administered is indicated for the general patient population.

b. 12 months of daily or twice weekly INH treatment is indicated for patients with concurrent HIV infection.

c. Pregnant patients shall have the need for preventive therapy made on an individual basis, depending on the patient’s estimated risk for progression to active TB and advice from the patient’s OB and Department of Health, as needed.

.26 Inmates shall be educated regarding all aspects of the medication regime including constant taking of the medication, possible side effects, and need for completion of the regime.

.27 Inmates refusing LTBI treatment shall sign a refusal form and their refusal shall be recorded on the Problem List under the medications section with the date of the refusal.
.28 All inmates refusing LTBI treatment shall be offered treatment on an annual basis as part of their annual TB screening. The request to consider treatment for LTBI will be recorded in the medical record. Inmates continuing to refuse will have that documented on their record. Those inmates reconsidering will be evaluated per the INH Nursing Protocol to begin treatment.

5.0 **SCOPE**

This policy and procedure applies to all correctional facilities and their assigned personnel.

**RECOMMENDED APPROVAL:**

[Signature]

Medical Director  
2/1/11

[Signature]

Health Care Division Administrator  
2/2/11

**APPROVED:**

[Signature]

Deputy Director for Corrections  
2/16/2011

[Signature]

Director  
2/16/2011
(date)

To: ______________________ (patient name),

Due to your health condition of ________________________, it is very important that you follow up with the Department of Health upon your release from the Maui Community Correctional Center.

Please contact:

Wailuku Health Center (WHC)  Lahaina Comprehensive Health Center
121 Mahalani Street 1830 Honoapiilani Highway, Room 116
Wailuku, HI 96793 Lahaina, HI 96761
(808) 984-2128 (808) 662-4031

Hours of operation are 7:45 – 4:30 Monday – Friday except holidays

Additional Instructions:

________________________________________
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________________________________________

"An Equal Opportunity Employer/Agency"
(Date)

To: ________________ (Patient Name),

Due to your health condition of ____________________________, it is very important that you follow up with the Department of Health upon your release from the Hawaii Community Correctional Center.

Please contact the Department of Health nearest your place of residence:

Hilo
75 Aupuni Street #105
Hilo, HI 96720
Phone: (808) 974-6006
Fax: (808) 974-6000

Kona
81-980 Halekii St. #103
Kealakekua, HI 96750
Phone: (808) 322-4880
Fax: (808) 322-4886

Waimea
67-5189 Kamamalu St.
Kamuela, HI 96743
Phone: (808) 887-8114
Fax: (808) 887-8118

Hours of operation are 7:45 am – 4:30 pm, Monday – Friday except holidays.

Additional Instructions: ________________________________

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"An Equal Opportunity Employer/Agency"
(date)

To: __________________________ (patient name),

Due to your health condition of __________________________, it is very important that you follow up with the Department of Health upon your release from the Kauai Community Correctional Center.

Please contact:

Kauai District Health Office
3040 Umi Street
Lihue 96766
(808) 241-3614

Hours of operation are 7:45 – 4:30 Monday – Friday except holidays

Additional Instructions:

________________________________________________________________________

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"An Equal Opportunity Employer/Agency"
(Date)

To: ___________________________ (Patient name),

Due to your health condition of ____________________________, it is very important that you follow up with the Department of Health upon your release from the Halawa Correctional Facility.

Please contact:

Hawai‘i Tuberculosis Control Program
Lanakila Health Center
1700 Lanakila Avenue
Honolulu, HI 96817
Phone: (808) 832-5731  Fax: (808) 832-5846

Hours of operation are 7:45 am – 4:30 pm, Monday – Friday except holidays.

Additional Instructions:

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____________________________________________________________________________________

"An Equal Opportunity Employer/Agency"
(Date)

To: ____________________________ (Patient name),

Due to your health condition of ____________________________, it is very important that you follow up with the Department of Health upon your release from the Oahu Community Correctional Center.

Please contact:

Hawai‘i Tuberculosis Control Program
Lanakila Health Center
1700 Lanakila Avenue
Honolulu, HI 96817
Phone: (808) 832-5731 Fax: (808) 832-5846

Hours of operation are 7:45 am – 4:30 pm, Monday – Friday except holidays.

Additional Instructions:

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"An Equal Opportunity Employer/Agency"
(Date)

To: ______________________ (Patient name),

Due to your health condition of ________________________________, it is very important that you follow up with the Department of Health upon your release from the Women’s Community Correctional Center.

Please contact:

Hawai`i Tuberculosis Control Program
Lanakila Health Center
1700 Lanakila Avenue
Honolulu, HI 96817
Phone: (808) 832-5731  Fax: (808) 832-5846

Hours of operation are 7:45 am – 4:30 pm, Monday – Friday except holidays.

Additional Instructions: ____________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
(Date)

To: ______________________ (Patient name),

Due to your health condition of ________________________________, it is very important that you follow up with the Department of Health upon your release from the Waiawa Correctional Facility.

Please contact:

Hawaiʻi Tuberculosis Control Program
Lanakila Health Center
1700 Lanakila Avenue
Honolulu, HI 96817
Phone: (808) 832-5731  Fax: (808) 832-5846

Hours of operation are 7:45 am – 4:30 pm, Monday – Friday except holidays.

Additional Instructions: ____________________________________________________________
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