GUIDANCE DOCUMENT CERTIFICATION

I have reviewed this guidance document or proposed guidance document and I certify that it complies with sections §227.10 and §227.11 of the Wisconsin Statutes.

I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is not explicitly required or explicitly permitted by a statute or a rule that has been lawfully promulgated.

I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is more restrictive than a standard, requirement, or threshold contained in the Wisconsin Statutes.

Kristin Nissen
Name of Individual Certifying this Document / Proposed Document

Program and Policy Chief
Title

Signature

4/17/2020
Date Signed

Department of Corrections – Wisconsin
Office of the Secretary
Wis. Stat. § 227.112(6)
DOC-2910 (Rev. 12/2019)
SUBJECT: Tuberculosis Control Program

Purpose

The purpose of this policy is to prevent and control tuberculosis infections among youth under the care of the Division of Juvenile Corrections.

Policy

The Division of Juvenile Corrections (DJC) will have tuberculosis control plans in compliance with the Centers for Disease Control (CDC) and the Wisconsin Division of Public Health (DPH) recommendations. This policy addresses screening of youth and management of diagnosed conditions. Employee testing is covered under separate policy.

References


Prevention and Control of Tuberculosis in Correctional and Detention Facilities; Recommendations from CDC MMWR 2006; 55 (No, RR-09, 1-44)

Core Curriculum on Tuberculosis, 5th Edition, 2011; CDC TB home page
http://www.cdc.gov/tb

Wisconsin Department of Health Services (DHS) Tuberculosis Program Division of Public Health (DPH) http://dhfs.wisconsin.gov/tb/index.htm

DJC Policy 500.60.01 – Infection Prevention and Control Program
DJC Policy 500.60.10- External Reporting of Communicable Disease
DJC Policy 500.60.13 – Infection Control- Airborne and Droplet Infections

Standards for Health Services in Juvenile Detention and Confinement Facilities, National Commission on Correctional Health Care, 2015, Y-B-01 Infection Control Program, Y-E-02 Receiving Screening

Occupational Safety and Health Administration (OSHA's) Respiratory Standard 29 CFR 1910.134

Wisconsin Statute § 302.38 - Medical care of prisoners
Wisconsin Statute § 302.386 - Medical and dental services for prisoners and forensic patients
Definitions, Acronym, and Forms

Advanced Care Provider (ACP) – Provider with prescriptive authority.

Airborne Infection Isolation Room (AIIR) – A single patient room with special ventilation characteristics appropriate for the purposes of isolating patients who have suspect or confirmed infectious TB disease. An airborne infection isolation room should have: 1) Negative pressure so airflows under the door gap into the room; 2) An airflow rate of 6-12 air changes per hour; and, 3) Direct exhaust of air from the room to the outside of the building or recirculation of air through a high efficiency particulate air filter.

Airborne Precautions – Intended to decrease the likelihood of transmission of organisms that can be carried in particles of less than five micrometers in dust particles or droplet nuclei that should be used for patients who are known or suspected to be infected with TB, measles, chicken pox and shingles.

Boosted reaction – When given TST years after infection, persons may have a false-negative reaction. However, the TST may stimulate the immune system, causing a positive or boosted reaction to subsequent tests.

DJC- Division of Juvenile Corrections

Electronic Medical Record (EMR)- system-wide electronic health record

Latent Tuberculosis Infection (LTBI) – A condition in which relatively small number of living tubercle bacilli (Mycobacterium tuberculosis) are present in the body but are not multiplying or causing clinically active disease. Infected persons usually have positive tuberculin skin test reactions, but they have no symptoms related to the infection and are not infectious.

Mantoux Method – Standard Tuberculin Skin Test method involving intradermal administration of 0.1 ml of purified protein derivative containing 5 Tuberculin Units to the volar surface of the forearm.

NIOSH – National Institute for Occupational Safety and Health

One Step Method – TB skin test on Day 1 and reading in 48 to 72 hours. This is used for persons who have had a TB test within the last 13 months.

Positive TST Reaction – Greater than or equal to 10 mm induration (not erythema) for the general youth population and greater than or equal to 5 mm induration for persons who are HIV+, have a documented exposure to a person with active TB, have fibrotic changes on chest radiograph consistent with TB disease, have history of organ transplant and other immuno-compromising conditions who receive the equivalent of greater than or equal to 15 mg/day of prednisone for one month or more. (Refer to table in Procedures I.B.).

QuantiFERON – TB Gold test (QFT-G) – An invitro cytokine assay that assesses the cell-mediated immune response to specific antigens of Mycobacterium tuberculosis in whole blood used to determine Mycobacterium tuberculosis infection. Requires only one visit, is more specific than the TST and is less affected by previous BCG vaccination and infection with nontuberculous mycobacteria.

Tuberculosis (TB) Disease – A clinically active disease state that is caused by organisms of the Mycobacterium tuberculosis complex, which are sometimes referred to as the tubercle bacilli. Persons who have TB disease usually have symptoms, which differ according to the site of disease. Commonly referred to as active TB. People with active disease are infectious to others.

Tuberculin Skin Testing – Method to determine likelihood that a person is infected with Mycobacterium tuberculosis. See Mantoux method. The area is examined 48-72 hours after injection and the indurated markings are read transverse (perpendicular) to the long axis of the forearm.

Two Step Method – A TB skin test on day one, reading in 48 to 72 hours, retest 7 to 21 days and reading in 48 to 72 hours. This method is used on individuals who have not had a TB skin test within the previous 13 months. The first test provides a booster effect for a more accurate antibody response to the second test.

DOC-3286J - Annual Tuberculosis and Health Maintenance Screening
**Procedure**

I. Screening
   
   A. General Procedure
      
      1. An interview to screen all youth for risk factors, signs, and symptoms of TB is utilized as part of the DJC Tuberculosis Control Plan.
      
      2. Screening consists of an interview for signs and symptoms and possible TST for youth with a high index of suspicion for TB.
         
         a. Screening is conducted by a licensed nurse.
         
         b. If any positive (yes answers) indicators are identified during screening the youth will be assessed including completion of vital signs, and administration of a TST by a registered nurse (RN).
      
      3. The Mantoux TST is the standard method of determining whether a person is infected with mycobacterium tuberculosis.
      
      4. Pregnancy, lactation, or previous vaccination with Bacillus Calmette-Guerin BCG vaccine is not contraindications for a TST.
      
      5. TST and screening shall be documented in the EMR or on the DOC-3286J.

   B. Interpretation of TST results shall be completed by a licensed nurse. See table below:

<table>
<thead>
<tr>
<th>An induration of 5 or more mm is considered positive in:</th>
<th>An induration of 10 or more mm is considered positive in:</th>
<th>An induration of 15 or more mm is considered positive in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV-infected patients.</td>
<td>Recent immigrant (&lt; 5 years from high prevalence countries.</td>
<td>Any patient, including patients with no known risk factors for TB. However, targeted skin testing programs should only be conducted among high-risk groups.</td>
</tr>
<tr>
<td>A recent contact of a person with TB disease.</td>
<td>Injection drug users.</td>
<td></td>
</tr>
<tr>
<td>Patients with fibrotic changes on chest radiograph consistent with prior TB.</td>
<td>Residents and employees of high-risk congregate settings.</td>
<td></td>
</tr>
<tr>
<td>Patients with organ transplants.</td>
<td>Mycobacteriology laboratory personnel.</td>
<td></td>
</tr>
<tr>
<td>Patients who are immunocompromised for other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
reasons (e.g., taking the equivalent of > 15 mg/day of Prednisone for one month or longer, taking TNF-a antagonists.)

- Patients with clinical conditions that place them at high risk.
- Adolescents exposed to adults in high-risk categories.

1. Results shall be recorded in mm. of induration (area of firmness) and the diameter is to be read perpendicular to the long axis of the forearm. Erythema may be recorded as an observation, but is not used as interpretation of results.
2. A TST result that is considered positive shall be read by two licensed nurses, if possible, with at least one RN for confirmation.
3. A youth with a positive TST shall have a DOC-3029, completed by a RN. A copy of the form will be forwarded to the Systems Infection Control Coordinator.
4. Any youth with risk factors (as described in table above) and signs or symptoms of TB during screening or a positive TST, shall be isolated and referred immediately to an ACP.

II. QuantiFERON (QFT-G) TB – Gold Testing

A. QFT-G testing requires an ACP order.

B. QFT-G testing shall be used in conjunction with risk assessment, radiography and other diagnostic evaluations because it cannot distinguish between LTBI and TB disease.

C. A determination for QFT-G testing due to a positive TST during the admission or annual screening process shall be made by an ACP. In general, a QFT-G shall be completed 3-6 months after an administered TST to avoid a potential boosting affect from a TST.

D. Consultation with the WI DHS TB program as needed is encouraged for treatment planning for individual cases.

E. All QFT-G test results shall be reviewed by the ACP.

F. Further TST testing is not necessary when a patient has had a positive QFT-G.

G. The ACP shall determine the appropriate annual screening for youth who had a positive TST but a negative QFT-G. Screening for signs and symptoms and risk factors shall be completed for all patients. Additional options include:

1. TST.
2. QFT-G.
3. Screening for sign/symptoms and risk factors.

III. Chest X-Ray

A. Chest x-rays are not to be used in place of TST or screening for signs/symptoms.

B. Chest x-rays shall be completed in collaboration with an ACP order for youth with positive TST, positive QFT-G and/or signs and symptoms or risk factors for TB.

C. If a youth has signs and symptoms of active TB, a chest x-ray shall be done as soon as possible the same day.

D. If a youth does not have signs and symptoms of active TB, a chest x-ray shall be scheduled within one week of positive TST.
E. Pregnant youth with a positive TST or QFT-G or suspected active disease shall have a chest x-ray with appropriate protection.

IV. Sputum Specimens

A. In collaboration with an ACP order, sputum specimens are indicated in youth suspected of having active TB disease due to the following:
   1. Chest x-ray consistent with pulmonary TB disease, especially if respiratory symptoms suggest disease.
   2. Youth with chest x-ray findings suggestive of previous, healed TB disease.
   3. HIV infected youth with pulmonary symptoms.
   4. Youth suspected of having pulmonary TB disease for which bronchoscopy is planned.

B. Contact the WI DHS TB Coordinator for instructions on collecting the sputum and isolation and treatment needs of a youth.

C. A youth is considered potentially infectious for TB disease if sputum samples are being collected.

D. Sputum collection shall be collected in an AIIR. If a facility does not have an AIIR, coordinate care with local hospital.

V. Suspected Active Disease

A. If at any time a youth is suspected of having active disease, airborne precautions shall be instituted as outlined in DJC Policies 500.60.01 and 500.60.13.

B. The youth shall be placed in medical observation by an ACP.

C. The youth shall be housed in an AIIR located on grounds or offsite as predetermined by the facility’s procedure for TB Control.

D. Staff shall utilize PPE as appropriate, including N95. Refer to POC-0040A.

E. When a youth is out of the AIIR, they are to wear a surgical mask.

F. Each facility’s procedure for TB control shall have details on how N95 NIOSH respirators training and fit testing is accomplished.

G. When it is medically necessary to transport, a youth shall be transported by staff that are fit tested or wearing the airborne protection hoods via state vehicle unless the youth’s medical condition warrants alternate medical transport. Alternate transportation providers shall be notified of the youth’s status requiring airborne protection.

H. An ACP, in consultation with the WI TB Coordinator, shall determine when a youth may be released from respiratory isolation.

VI. Initial Intake

A. All incoming youth shall be interviewed for risk factors, signs and symptoms of TB at facilities with nursing on site.

B. This review is part of the EMR intake process or through completion of DOC-3018 and does not have to be repeated on DOC-3286.

C. A two-step Mantoux TST shall be performed as ordered through the EMR or on the DOC-3023 series, unless there is documentation of one or more of the following:
   1. Previous positive reaction.
   2. Previous two-step TST in the past 13 months.
3. If by interpretation the TST result is negative in the past 13 months only a one-step is necessary.

D. Youth with a previous history of a positive reaction shall be evaluated using the DOC-3029.

VII. Annual Screening

A. All youth shall be screened for signs and symptoms of TB on an annual basis utilizing the EMR or the DOC-3286.

B. Youth who have had a previous negative TST within the previous 13 months shall be screened with a one-step Mantoux (TST).

C. Youth who have not had a TST within the previous 13 months require the two step TST method.

D. Youth with previous positive reactions shall be screened for signs and symptoms. (See II.G.)

VIII. Refusals

A. Youth who refuse a TST shall be interviewed for signs and symptoms of active TB. An ACP may place a youth who refuses screening or testing in medical observation.

B. Youth refusal of testing shall result in counseling the youth regarding the refusal and informing the youth of potential consequences and risks to others.

C. Refusals shall be documented on the DOC-3220 and also noted on the DOC-3286.

D. The ACP shall be notified of all refusals.

E. If at any time health care staff becomes suspicious a youth has active TB disease, the youth shall be isolated and an ACP shall be consulted immediately.

F. The youth shall remain in medical observation until one of the following occurs:
   1. An ACP determines the youth is not at risk for transmitting active disease to others.
   2. The youth complies with screening or TST.

G. Youth shall not be transferred to another facility while in medical observation status, unless a higher level of care is necessary.

IX. Reporting

A. HSU staff shall communicate precautions by completing a DOC-3504.

B. Actual or suspected active disease requires immediate reporting via telephone to the local public health agency.

C. DPH-4151 – Acute and Communicable Disease Case Report shall be completed consistent with DJC 500.60.10.

D. The facility Health Services Manager or designee shall notify the Superintendent, Regional Chief, or designee, Facility Infection Control designee, and the DJC Nursing Coordinator of youth who test positive for TB.

X. Diagnosis

A. A positive TST is not a diagnosis.

B. The ACP shall make a diagnosis based on risk assessment and testing.
   1. No disease.
   2. Atypical TST.
3. Latent Tuberculosis Infection (LTBI).

4. Active TB/TB disease.

XI. Medical and Case Management – Latent Tuberculosis Infection

A. The ACP shall evaluate all youth with LTBI for potential chemoprophylaxis.

B. First-line treatment for newly diagnosed cases of LTBI shall include a combination regimen of INH plus RPT administered together weekly for 12 weeks through direct observed therapy. Standard dosage is as follows:
   1. INH: 15 mg/kg rounded up to the nearest 50 or 100 mg (900 mg maximum).
   2. RPT: >=50 kg (900 mg maximum); lower doses for weights under 50 kg.

C. This regimen is not recommended for youth with:
   1. HIV/AIDS who are being treated with protease inhibitors and most non-nucleoside reverse transcriptase inhibitors.
   2. Youth presumed to be infected with INH or RIF-resistant M. tuberculosis.
   3. Pregnant youth or youth on supervision who may become pregnant within the 12 week regimen.

D. Youth with a history of positive TST results who have previously completed treatment for LTBI do not need to be treated again unless concern exists that reinfection has occurred.

E. Youth diagnosed with LTBI shall be scheduled for an annual review for signs/symptoms of TB following treatment and will no longer receive an annual TST.

F. Baseline and routine laboratory monitoring during treatment of LTBI are indicated only when there is a history of liver disease, HIV infection, pregnancy (or within three months post-delivery). Baseline hepatic measurements include:
   2. Aspartate Aminotransferase (AST).
   3. Alanine Aminotransferase (ALT).

G. Liver Function Tests (LFTs) are recommended every two to four weeks while on therapy in youth with abnormal liver tests and/or liver disease.

H. Youth on INH and RPT therapy shall be assessed and monitored as directed on the DOC-3032.

I. Prescribed treatment with INH and RPT shall be administered by licensed health staff using Directly Observed Therapy (DOT) weekly for 12 weeks and shall be documented in the EMR or on the DOC-3026.

XII. Contact Investigation

A. Facilities shall work with the DJC Nursing Coordinator in collaboration with the Bureau of Health Services, WI DHS TB Program Director, Facility Infection Control designee, their Local Public Health Agency (LPHA), and their assigned employee health nurse in determining if and how to proceed with contact investigation.

B. The investigation shall focus on identifying the contacts of highest risk for transmission, screening, and determination of appropriate treatment if needed.

C. Guidelines for contact investigation methods are identified in the Core Curriculum on Tuberculosis, 5th Edition, 2011; CDC TB home page.
XIII. Continuity of Care

A. Discharge planning shall be done to ensure that youth who are receiving treatment are able to obtain medications and be followed in the community for compliance.

B. Youth who are receiving treatment for LTBI or active TB shall be referred to the county public health department where they will reside upon discharge.

C. The DPH-F-44000 – Wisconsin Antituberculosis Therapy Program Initial Request for Medication shall be completed and forwarded to the LPHA to obtain prescriptions and alert the LPHA to follow the youth for compliance. If the youth’s community address is unknown, enter the name and telephone number of the DJC supervising agent if applicable.

D. Prior to release, HSU staff shall educate the youth of the need for continued care. The need for continued treatment shall be documented on the DOC-3314.

XIV. Prevention and Surveillance


B. A copy of all DOC-3029 shall be sent to the DJC Nursing Coordinator and the BHS Infection Control Coordinator for review.

cc: Office of the Secretary
    DJC Leadership Team
Division of Juvenile Corrections Facility/Region Implementation Procedure

Facility/Region: 
DJC Policy Number: 500.60.02  
Subject: Tuberculosis Control Program - Youth  
New Effective Date: 5/18/2016  
Original Effective Date: 5/18/2016  
Will Implement: ☐ As Written ☐ With following procedures for facility implementation  
Superintendent’s/Regional Chief’s Approval:

REFERENCES

DEFINITIONS, ACRONYMS, AND FORMS

FACILITY PROCEDURE

I.
   A.
   B.
      1.
      2.
         a.
         b.
         c.
   3.
   C.

II.

III.

RESPONSIBILITY

I. Staff

II. Youth

III. Other