DEPARTMENT OF PUBLIC HEALTH

Appleton Health Department Procedures

Title: Active Tuberculosis Disease Case Management			
Procedure #: N_205_1_PRO			
Creation Date:	2/24/2025	**Last Approved Date:**	Reviewed Annually
Description:	Active Tuberculosis Disease Case Management Procedure		
PHAB Domain/ Standard/ Measure:	2.1.4 A: Maintain protocols for investigation of public health issues. 2.1.5 A: Maintain protocols for containment and mitigation of public health problems and environmental public health hazards.		
Statutory Authority/ Evidence Base/ Links:	Chapter 252: Communicable Diseases (specifically, 252.07 Tuberculosis): https://docs.legis.wisconsin.gov/statutes/statutes/252/07		
Author(s)/ Reviewer(s):	Valerie Davis, Sonja Jensen, Jena McNiel, Katie Schink-Pawlowski		

Procedure Approval Tracking

Created/ Reviewed/ Revised Date	Legal Services Approval Date	Board of Health Approval Date	Council Approval Date	Health Officer or Designee Signature (Name/Title)
Created 2/24/2025	08.27.2025			

Purpose

To provide education and treatment in accordance with best practice to clients diagnosed with Active TB (tuberculosis) disease to prevent transmission of TB and to reduce the likelihood of drug-resistant Active TB in the future.

Procedure

TB Disease/TB Disease rule-out follow-up:
For clients with symptoms and/or abnormal chest imaging that may be indicative of TB, sputum x3 will need to be collected. **Client needs to be in isolation pending sputum results.**

1. Notify Public Health Nursing (PHN) Supervisor of Suspect Tuberculosis case.
2. Review and follow the P-00647 Nurse Case Management for Active Tuberculosis (TB) Disease document from the WI TB Program.[i]
3. Call the WI TB Program to notify them about the client. Discuss the next steps and any additional information that should be collected from the provider and client.
4. Attempt to reach the client by phone, same day as the referral.
5. If unable to reach the client, contact the health care provider to see if there are other phone numbers or addresses and/or make an unannounced home visit. Consult with Public Health Nursing Supervisor.
6. If the client is hospitalized, contact the health care provider and/or infection preventionist the same day as the referral.
7. If unable to reach the client on the same day, provide verbal and written report to intake nurse scheduled for the following day. Notify Public Health Nursing Supervisor.
8. If the client can produce sputum PHN will offer to collect. If the client is unable to produce sputum a discussion with the provider's office about ordering induced sputum needs to occur. Clients with symptoms that have no chest imaging will need to see a medical provider for chest x-ray/CT. If the client needs to see a medical provider they will need to wear a mask, and PHN needs to communicate with provider's office regarding suspect TB disease and precautions to take at facility.
    a. For diagnosis of TB, collect three initial sputum specimens for AFB smear and culture, 8 to 24 hours apart, with at least one early morning specimen (observe collection if possible).
    b. Patient Specimen Collection Instruction Video[ii] in multiple languages is helpful for patients to view prior to specimen collection. Written Respiratory Specimen Collection-Client Instructions[iii] can also be provided.
    c. Nursing staff use Kit # 8 Collection of Respiratory Specimens for Mycobacteria and Legionella with Sputum Collection Instructions[iv] and WSLH Category B Packaging and Shipping Handout.[v] Once the specimen is packaged and ready for pick-up, call Purple Mountain Courier at 1-800-990-9668, option #1. If you call in the afternoon, specimen(s) will not be picked up until the following business day.

d. See WEDSS charting instructions and additional guidance recommendations per WI State TB program, P-02426 Documenting Latent Tuberculosis Infection (LTBI) in the Wisconsin Electronic Disease Surveillance System (WEDSS)[vi]

Release from Isolation:

Suspect Tuberculosis

A client should have three consecutive negative AFB sputum smears and/or negative PCR (Often one sample at minimum will have PCR testing completed). Culture results will remain pending (6 to 8 weeks). Clients with 3 negative sputum specimens should be evaluated for Latent Tuberculosis treatment. Continue to Latent Tuberculosis Infection Case Management Procedure[vii]. If this client is NOT started on TB treatment, and later develops a positive culture, the client (now diagnosed with TB disease) must begin TB treatment and home isolation. Continue to Active Tuberculosis section.

Active Tuberculosis

A client with active TB disease may be released from isolation when client:

- has received appropriate anti-tuberculosis medication for two weeks; AND
- is compliant with DOT; AND
- has at least 3 AFB-negative smears and/or 2 negative PCRs or has been unable to produce sputum upon induction (However, PHN may consult with State TB Nursing Consultant to discuss continuation of home isolation.); AND
- has no risk factors for multiple drug resistant (MDR) TB, such as:
    - history of incomplete treatment of TB
    - close contact of a case of MDR-TB; AND
- there is clinical improvement, OR
    - upon consultation between provider and State TB program, it is agreed that there is clinical and/or radiographic improvement despite continuing cough.

If smear and/or culture are still positive after two months of treatment, consult with experts. If culture is positive after three months, consider drug resistance, nonadherence, or poor drug absorption (90-95% of TB patients will be culture negative after 3 months of treatment). If

sputum culture is still positive after four months of treatment, the patient is considered to be in treatment failure and consultation with experts is necessary.

Multiple Drug-Resistant Tuberculosis (MDR-TB)

Generally, more stringent requirements must be met before isolation can be discontinued in persons with MDR TB. Consult with State TB Nursing Consultant to determine guidelines for release from isolation.

A client should have resolution of cough, have been on a 4-drug or 5-drug treatment regimen to which the TB is sensitive for at least 6 weeks, and be treatment compliant. A client must have at least 3 negative cultures and 3 negative Acid-Fast Bacillus (AFB) smears. The requirements for discontinuation of isolation are stricter because the drugs that rapidly render persons with pulmonary TB non-infectious are isoniazid and rifampin. The second line drugs have much weaker bactericidal activity. The exception is likely moxifloxacin, which in recent studies has been shown to have activity close to that of rifampin.

Medication Management

1. Review and follow P-00647 Nurse Case Management for Active Tuberculosis (TB) Disease.[viii]
2. Complete initial request for medications form F-44000 Tuberculosis Disease Initial Request for Medication[ix] and identify pharmacy or address where PHN will pick up medications. The State TB Program as well as Health Officer and Public Health Nursing Supervisor must be notified of any new active disease cases prior to medication ordering.
3. Medications for Active Disease may be obtained.
    A. Mailed/shipped from Aurora Pharmacy through WI State TB Dispensary
        1. Review medication order for accuracy (form complete, dosage correct, etc.)
        2. At the bottom of page 1 of the med order under the Pharmacy section, check “TB Dispensary Pharmacy”.
        3. Notify State TB Program of medication order and upload into WEDSS record filing cabinet.
        4. Once approved by the State TB Program, it will be sent to Aurora Pharmacy for fulfillment and shipment to the local health department.

    5. Consult State TB Program staff if medications prescribed by the client's physician do not conform to TB Program or CDC guidelines.
4. Clients with active tuberculosis should be started on medication within 48 hours of receipt of the medication, unless circumstances make it impossible. Patients discharged from hospital should be provided with sufficient medication by the hospital pharmacy to ensure no missed doses.
5. Standard care for persons with active TB is to provide directly observed therapy (DOT). Continue to Tuberculosis Directly Observed Therapy Procedure[x].
6. Assure patient's final visit with the physician occurs at the end of treatment. Consider chest x-ray per State recommendations. PHN should set a final visit with the client to answer any final questions, review once again the signs of active TB, and complete F-02474 Active Tuberculosis (TB) Disease Follow-up Report[xi] and provide a copy to the client.
7. Complete electronic record documentation. See WEDSS charting instructions and additional guidance recommendations per WI State TB program, P-02426 Documenting Latent Tuberculosis Infection (LTBI) in the Wisconsin Electronic Disease Surveillance System (WEDSS).[vi] Any paper charting should be filed in 6th floor storage room.
8. Limitations: Although the healthcare of people affected by TB is coordinated by Public Health Nurses, many interventions can be brief (i.e. DOT once client is established on TB regimen) and provide information/education regarding TB. However, Public Health Nurses should also make referrals to appropriate resources (i.e. If a client has questions about food pantries in the area, it may be more resourceful to have the client call 211 and find out where the most convenient food pantry is for that client). Public Health Nurses are not always the appropriate person for lengthy individual counseling or triage/management of medical emergencies. As Public Health Nurses, staff cannot diagnose conditions beyond the scope of nursing practice or outside the realm of public health services. While suggestions can be made regarding health complaints, clients should always be referred to their health care providers or to an appropriate clinic.

Contacts

A. Continue to Tuberculosis Contacts Procedure.[xii]

Definitions

Active TB Disease: Active tuberculosis (TB) disease happens when the immune system cannot keep TB germs from multiplying and growing in the body. People with TB disease feel sick and can spread TB germs to others. TB disease can almost always be treated and cured with medicine. Without treatment, it can be fatal.

AFB smear: Specimens are smeared onto a glass slide and stained so that they can be examined for acid-fast bacilli (AFB) under a microscope. Results can show a possible or likely infection but cannot be used to provide a diagnosis.

CDC: Center for Disease Control

DOT: Directly Observed Therapy for TB is a best practice where a trained healthcare worker observes a patient taking their TB medications.

Latent or Inactive Tuberculosis: Tuberculosis (TB) germs can live in the body for years without making you sick. This is called inactive TB or latent TB infection. People with inactive TB do not feel sick, do not have symptoms, and cannot spread TB germs to others. Without treatment, inactive TB can develop into active TB disease at any time and make you sick.

Multiple Drug-Resistant Tuberculosis (MDR-TB): A strain of tuberculosis (TB) that is resistant to treatment.

PCR culture: A PCR (polymerase chain reaction) test is a lab technique that amplifies (creates more copies) of genetic material (DNA). can use PCR to test for infectious diseases.

WEDSS: Wisconsin Electronic Disease Surveillance System

Attachments

ATS, CDC, Infectious Disease Society of America. Treatment of Drug-Susceptible Tuberculosis. *Clinical Infectious Diseases*. October 2016. Vol. 63. https://academic.oup.com/cid/article/63/7/e147/2196792

[1] USDHHS, CDC. Core Curriculum on Tuberculosis: What the Clinician Should Know. (current edition)

Wisconsin State Statutes Chapter 252: Communicable Diseases

Wisconsin Administrative Codes Chapter DHS 145: Control of Communicable Diseases

---

[i] P-00647 Nurse Case Management for Active Tuberculosis (TB) Disease https://www.dhs.wisconsin.gov/publications/index.htm

[ii] Patient Specimen Collection Instruction Video https://youtube.com/playlist?list=PLO9RoNDnObhOcYPpeYMTG3BpPHU5-Le6H&si=BwK8_GnFlBKOq9rE

[iii] Respiratory Specimen Collection Client Instructions City of Appleton\Shared Documents\Nursing\Communicable Disease\Tuberculosis

[iv] Kit # 8 Collection of Respiratory Specimens for Mycobacteria and Legionella with Sputum Collection Instructions https://www.slh.wisc.edu/clinical/diseases/supplies/

[v] WSLH Category B Packaging and Shipping Handout https://www.slh.wisc.edu/clinical/diseases/packaging-and-shipping/

[vi] P-02426 Documenting Latent Tuberculosis Infection (LTBI) in the Wisconsin Electronic Disease Surveillance System (WEDSS) https://www.dhs.wisconsin.gov/publications/index.htm

[vii] N_205_2_Latent Tuberculosis Infection Case Management City of Appleton\Shared Documents\General\POLICIES

[viii] P-00647 Nurse Case Management for Active Tuberculosis (TB) Disease https://www.dhs.wisconsin.gov/publications/index.htm

[ix] F-44000 Tuberculosis Disease Initial Request for Medication https://www.dhs.wisconsin.gov/forms/index.htm

[x] N_205_3_PRO_Tuberculosis Directly Observed Therapy City of Appleton\Shared Documents\General\POLICIES

[xi] F-02474 Active Tuberculosis (TB) Disease Follow-up Report
https://www.dhs.wisconsin.gov/forms/index.htm

[xii] N_205_4_PRO_Tuberculosis Contacts
City of Appleton\Shared Documents\General\POLICIES