Tuberculosis and Infection Prevention Resources

Kelly White, Kathy Chapuran and Mary Weber

Indiana Department of Health

Introduction

M. Tuberculosis can be transmitted in virtually any setting. The role of infection preventionists (IPs) is incredibly important as they work in health care settings to assist in preventing the spread of infection among health care personnel, patients and visitors.

Discharge Planning Checklist Template

A few important points:

- Use of the template checklist is not required, and hospitals may modify the content to meet their needs.
- The steps on the checklist do not need to be completed by one person. They can be divided up among multiple individuals. Use the checklist in a way that makes the most sense for your organization.
- TB disease cases and suspects are reported to the Indiana Department of Health via submitting a TB Morbidity Report in NBS and attaching a completed Report of TB.

Tuberculosis Hospital Discharge Planning Checklist

Patient initials: _____ Date of Birth: _____
Patient's county of residence local health department: _____ Phone:_____
Provider responsible for ongoing treatment: _____ Phone: _____

Continuity of care is essential to successful TB treatment. Because of the complexity of treatment and the public health concerns involved, the TB patient's local public health department should be involved in hospital discharge planning. Patients with TB disease (confirmed cases & patients suspected of having TB disease) should be discharged only after ALL the following recommendations are addressed.

☐ **Report to the Indiana Department of Health.**
___ Submit a Tuberculosis Morbidity Report in NBS and attach a completed Report of TB
☐ **Consider isolation needs:**
___ Ensure discharge setting does not include immunocompromised persons or children younger than 5 years old. Infectious patients CANNOT be discharged to settings with those individuals and alternate arrangements will need to be made.
___ For infectious patients, consider logistics of primary care appointments for new and pre-existing conditions and ensure appropriate follow-up.
___ Reinforce the need to stay home (except for healthcare visits, where masks should be worn) until the health department and clinician determine that isolation is no longer needed.
___ Do not discharge infectious patients to congregate settings (e.g., nursing home, shelter, correctional facility) unless they will be in an airborne infection isolation room.
☐ **Ensure that patient is tolerating daily dosing of TB medications.**
___ The first-line TB medications should be given at the same time of day in a single daily dose.
___ Address any adverse effects prior to discharge.
☐ **Educate the patient.**
___ Use a professional medical interpreter when necessary.
___ Educate patient about the length of therapy, the importance of careful adherence to treatment and follow-upappointments, and the consequences of untreated TB.
___ Emphasize the benefits of directly observed therapy (DOT) as an effective way to complete TB therapy as quickly as possible and prevent drug resistance. DOT is the standard of case for all patients with presumed or confirmed TB disease.
___ Review potential medication side effects and when to report them.
___ Reinforce infection control measures to patients with infectious TB (i.e., wear a mask; stay home from school, work, other public settings; avoid contact with previously unexposed persons; cover mouth when coughing or sneezing).
☐ **Coordinate discharge plan and arrange DOT.**
___ Coordinate follow-up care between patient and their local public health department to ensure that treatment continues, and infection control precautions are followed in the community.
___ Assess patient for potential barriers that could interfere with treatment (e.g., access to care, unstable housing, language barriers, cultural beliefs, and substance abuse). Collaborate with the local health department to address them.
___ If patient has skilled nursing needs other than DOT, these may need to be coordinated with a separate home care agency.
☐ **Inform patient that the local health department will call to confidentially arrange follow-up.**
☐ **Provide TB medications.**
___ Obtain free medications by submitting a prescription to Purdue Pharmacy. You may be asked to supply enough medications to last until Purdue Pharmacy medications arrive at the local health department (approximately 5 days).
Do not simply provide prescriptions because there is no assurance that the patient can or will fill them.
☐ **Verify patient locating information.**
___ Obtain correct address (e.g., apartment number [not P.O. box], address where patient will be staying if different from home).
___ Obtain patient's phone numbers (home, work and cell).
___ Obtain phone numbers of patient's emergency contacts (home, work and cell).
☐ **Schedule a follow-up outpatient appointment.**
___ Ensure that follow-up appointments are scheduled and both the patient and LHD are aware of the appointment schedule.

TB Tips for Infection Preventionists

Indiana Department of Health

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TB and LTBI Point(s) of Contact and Discharge Planning

- The local health department (LHD) is the infection preventionist's (IP's) primary point of contact for tuberculosis (TB) and latent TB infection (LTBI):
  - Know the LHD public health nurses (PHNs) in your area.
  - Please ensure discharge planning for TB suspects/cases is discussed with the LHD PHN BEFORE the patient is released.
  - Consider using a discharge planning checklist.

Reporting

- All TB cases and suspects as well as LTBI cases are reportable in Indiana via NBS:
  - Please report TB cases and suspects with a TB morbidity report.
  - Please report LTBI cases with an LTBI investigation.

How to report TB and LTBI

Please refer to the NBS TB/LTBI Reporting Guides/Flowcharts at the following link: https://www.in.gov/health/idepd/tuberculosis/training-and-education/tb-nbs-training-materials/#NBS_Training

TB Inpatient Care

- Please refer to provided guidance/treatment cards/your local LHD PHN for questions about TB inpatient care:
  - Please ensure specimens collected have smear, **PCR/NAAT** and cultures ordered.
  - Specimens can be referred to the IDOH Lab for PCR through LIMSNET.
  - For TB suspects not producing sputum spontaneously and where induction hasn't worked, it is suggested sputa be obtained when bronch is performed as sputa production seems to increase at this time.

Healthcare Personnel Screening

- Ensure facility follows the CDC guidelines for screening of Health Care Personnel[1]:
  - Baseline testing for new staff, including TB personal risk assessment.
  - Requirement for annual TB education for all healthcare personnel.
    - Education should include information on TB risk factors, the signs and symptoms of TB disease and TB infection control policies and procedures.
  - No routine serial testing is required for staff unless there is known exposure or ongoing transmission at the healthcare facility.

[1] https://www.cdc.gov/tb/topic/testing/healthcareworkers.htm (accessed June 2022)

TB Infection Control Policies

- All facilities should have an internal plan for addressing TB exposures within the facility and conducting a contact investigation.
- Contact investigation results, including individual test results for staff, are reportable to the applicable LHD or IDOH.
- Facilities should still annually update the "Tuberculosis (TB) Risk Assessment Worksheet" (Appendix B, MMWR "Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005").

Electronic versions of the resources can be located via the QR code.

Isolation Guidance

Individuals with TB disease may need to be isolated to stop the spread of disease. Discontinuation of isolation should only be done in partnership with the local health department, and the table below has key details.

Guidance on Release from Hospital Tuberculosis Isolation[a]

Diagnostics:	Clinical Impression:	Under Airborne Isolation (AII) and discharging to:	Patient must meet all criteria:
Sputum **AFB Smear Positive** ***AND*** **NAAT Positive**	Active TB Disease	**Home—No** high risk individuals or individuals without prior exposure	• Follow-up plan has been made with local TB program and DOT has been arranged[b] • Started on standard TB treatment • All household members, who are not immunocompromised, have been previously exposed to the person with TB • Patient is willing to not travel outside the home until negative sputum smear results are received • No infants or children younger than 5 years of age or persons with immunocompromising conditions are present in the household who have not been evaluated and started on appropriate treatment
		Home—WITH high risk individuals OR **High-Risk/Congregate Setting**	Patients with infectious TB should NOT be allowed to return to a setting with high risk individuals. The patient can be *discharged* and is considered non-infectious if: • Three consectutive negative sputum smears from sputum collected in 8 - 24 hour intervals (at least one early morning specimen) ***AND*** • Started on drug regimen and tolerating for AT LEAST 2 weeks or longer ***AND*** • Symptoms have improved
Sputum **AFB Smear Negative** (or No Sputum AFB Smear Done) ***AND*** **NAAT Positive**	High likelihood of TB	**Home**—with/without high risk individuals OR **High-Risk/Congregate Setting**	• Three consecutive negative sputum smears from sputum collected in 8 to 24 hour intervals (at least one early morning specimen) • Started on standard TB treatment and tolerating for AT LEAST 5 days • A plan has been made to follow-up on culture results • No infants or children younger than 5 years of age or persons with immunocompromising conditions are present in the household who have not been evaluated and started on appropriate treatment
Sputum **AFB Smear Negative** ***AND*** **NAAT Negative**	High likelihood of TB	**Home**—with/without high risk individuals OR **High-Risk/Congregate Setting**	

Contact Tracing

A TB contact investigation is a TB control strategy used to identify, find and assess TB contacts and provide appropriate treatment for LTBI or TB disease, if needed.

Effective contact investigations interrupt the spread of TB in communities and help prevent outbreaks of TB. All facilities need to have an internal plan for addressing TB exposures within the facility and conducting a contact investigation.

A contact investigation data collection template is available to assist in identifying the data to be collected as part of a contact investigation.

Contact investigation results, including individual test results for staff, are reportable to the applicable local health department or the Indiana Department of Health.