

Isolating Potentially Infectious Tuberculosis (TB) Patients

MDH RECOMMENDATIONS

Recommendations for isolating potentially infectious TB patients differ depending on sputum smear results; level of clinical suspicion; drug sensitivity of the organism; type of setting; and the age, immune status and exposure status of household members.

These are general recommendations. Contact the Minnesota Department of Health TB Program at 651-201-5414 regarding individual patient situations (e.g., children 6 months of age or younger, suspicion of drug resistance, lack of sputum production even on induction) that may require more or less restrictive criteria.

I. Patients with initial sputum¹ smear-positive for Acid Fast Bacilli (AFB)

A. Home Isolation

For patients with at least one positive AFB smear from sputum¹ and high clinical suspicion² of TB and a presumed pansensitive organism, regardless of chest x-ray findings, home isolation may be considered, when **all** of the following criteria are met for each category:

Household with previously exposed children younger than five years of age:

1. Children must have been evaluated for TB and be receiving window prophylaxis via Directly Observed Therapy (DOT); and
2. Patient must be receiving and tolerating appropriate four-drug TB treatment via DOT.
 - a. **Note:** Patient, if the children's primary caregiver, should wear a surgical mask for at least the initial two weeks of TB treatment and minimize the time spent around the children.
 - b. **Note:** Patient, if a breastfeeding mother, should wear a surgical mask while breastfeeding for at least the initial two weeks of TB treatment.
 - c. **Note:** Patient, if not the children's primary caregiver, should be separated from the children if possible.
 - d. **Note:** Patient, if resident of a household with a child younger than six months of age, might not be eligible for home isolation. **Contact the Minnesota Department of Health TB Program.**

Household with previously exposed immunocompromised individuals five years of age and older:

1. Immunocompromised individuals must be evaluated for TB and receiving window prophylaxis; and
2. Patient must be receiving and tolerating appropriate four-drug TB treatment via DOT.

Household with previously exposed immunocompetent individuals five years and older:

1. Patient must be receiving and tolerating appropriate four-drug TB treatment via DOT.

Home isolation may be discontinued when the patient is deemed non-infectious and meets all the following criteria:

1. Patient must be receiving and tolerating appropriate four-drug TB treatment for **fourteen days or more** via DOT;
2. Patient must show clinical improvement or be asymptomatic; and
3. Patient must demonstrate smear conversion (i.e., three consecutive AFB smear-negative results from sputum specimens collected more than eight hours apart).

B. Congregate Settings

Congregate settings refer to hospitals, jails, nursing homes, rehab centers, shelters, halfway houses, elder day cares, dialysis units) require a patient to be **non-infectious** and meet all of the following criteria:

1. Patient must be receiving and tolerating appropriate four-drug TB treatment for fourteen days or more via DOT;
2. Patient must show clinical improvement or be asymptomatic; and
3. Patient must demonstrate smear conversion (i.e., three consecutive AFB smear-negative results from sputum specimens collected more than eight hours apart).

II. Patients with initial sputum¹ smear-negative for AFB

Patients with three consecutive negative AFB smears from sputum¹ and high clinical suspicion² of TB and a presumed pansensitive organism, regardless of chest x-ray finding, may return to their household/living situation when all of the following criteria are met:

Home Isolation

1. Patient must be receiving and tolerating appropriate four-drug TB treatment via DOT;
2. Previously exposed children younger than five years of age are being evaluated for TB and will start window prophylaxis via DOT; and

3. Previously exposed immunocompromised individuals are being evaluated for TB and will start window prophylaxis via DOT.

Note: Home isolation is recommended for the initial three to five days of appropriate four-drug TB treatment.

Congregate Settings

Congregate settings refer to hospitals, jails, nursing homes, rehab centers, shelters, halfway houses, elder day cares, dialysis units).

1. Patient must be receiving and tolerating appropriate four-drug TB treatment for three to five days via DOT; and
2. Patient must show clinical improvement or be asymptomatic.

Footnotes

¹ In the absence of sputum specimen results, other respiratory specimens (e.g., bronchoalveolar lavage) should be interpreted in the same way as in the above recommendations for sputum. However, if AFB smear results from both sputum and other respiratory specimens are available, the sputum smear results override the results of other respiratory specimens.

² High clinical suspicion includes patients for whom antituberculosis treatment has been initiated.

References

American Academy of Pediatrics. [Tuberculosis]. In: Pickering LK, Baker CJ, Kimberlin DW, Long SS, eds. Red Book: 2009 Report of the Committee on Infectious Diseases. 28th eds. Elk Grove Village, IL: American Academy of Pediatrics; 2009 [pages 696-698].

Centers for Disease Control and Prevention. Controlling Tuberculosis in the United States: Recommendations from the American Thoracic Society, CDC and the Infectious Diseases Society of America. MMWR 2005;54(No.RR-12): [page 9].

Centers for Disease Control and Prevention. Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005. MMWR 2005;54 (No.RR-17) [pages 16, 43].

Centers for Disease Control and Prevention. 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).

Francis J. Curry National Tuberculosis Center. Tuberculosis Program Manual Template. Accessed October 29, 2010 [www.nationaltbcenter.edu/research/tb_manual_template.cfm].

Heartland National Tuberculosis Center. Guidelines for Home and Hospital Isolation of Infectious Tuberculosis Patients. Accessed October 29, 2010 [www.heartlandntbc.org/newsletters/tbeat_vol_4_issue_2.pdf].

Minnesota Department of Health
TB Prevention and Control
651-201-5414
www.health.state.mn.us/tb

01/22/2020

To obtain this information in a different format, call: 651-201-5414.