Isolating Potentially Infectious Tuberculosis (TB) Patients
Recommendations from the Minnesota Department of Health

Recommendations for isolating potentially infectious tuberculosis (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., suspicion of drug resistance, lack of sputum production even on induction) that may require more or less restrictive criteria.

I. Patients with initial sputum\(^1\) smear-positive for Acid Fast Bacilli (AFB)

A. Home Isolation

For patients with at least one positive AFB smear from sputum\(^1\) and high clinical suspicion\(^2\) 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:

1. Household with previously exposed children younger than five years of age
   - Children must have been evaluated for TB and be receiving window prophylaxis via Directly Observed Therapy (DOT) and
   - Patient must be receiving and tolerating appropriate four-drug TB treatment via DOT.
   - 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.
   - Note: Patient, if a breastfeeding mother, should wear a surgical mask while breastfeeding for at least the initial two weeks of TB treatment.
   - Note: Patient, if not the children’s primary caregiver, should be separated from the children if possible.

2. Household with previously exposed immunocompromised individuals five years of age and older
   - Immunocompromised individuals must be evaluated for TB and receiving window prophylaxis and
   - Patient must be receiving and tolerating appropriate four-drug TB treatment via DOT.

3. Household with previously exposed immunocompetent individuals five years and older
   - 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:

- Patient must be receiving and tolerating appropriate four-drug TB treatment for fourteen days or more via DOT and
- Patient must show clinical improvement or be asymptomatic and
- 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 (e.g., hospital, jail, nursing home, rehabilitation center, shelter, halfway house, elder day care, dialysis unit) require a patient to be non-infectious and meet all of the following criteria:

- Patient must be receiving and tolerating appropriate four-drug TB treatment for fourteen days or more via DOT and
- Patient must show clinical improvement or be asymptomatic and
- 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 sputum\(^1\) smear–negative for Acid Fast Bacilli (AFB)

Patients with three consecutive negative AFB smears from sputum\(^1\) and high clinical suspicion\(^2\) 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:

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

B. Congregate setting (e.g., hospital, jail, nursing home, rehabilitation center, shelter, halfway house, elder day care, dialysis unit)
- Patient must be receiving and tolerating appropriate four-drug TB treatment for three to five days via DOT and
- 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:


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].

