

My town has a TB Disease case... Now what?

What is TB Disease?

- TB Disease = Active TB (the case has symptoms and can transmit the disease)
- TB Infection = Latent TB (the case does not have symptoms and cannot transmit the disease)

Notifications

Disease State **1**

Disease State: TB Disease

In MAVEN, TB Disease cases are considered an **Immediate Disease**, meaning you will receive an e-mail notification, and it will populate your **TB suspect/case notification not acknowledged** workflow.

TB is very different from the other diseases you will investigate in MAVEN. Your role involves more case management than simply collecting information. TB events will stay in your workflows for the duration of the patient's treatment, which can last 9+ months.

How do I start working on a case?

- Complete admin steps 1-3.
 - Unlike other disease investigations, you do not complete Step 4—CRF's are completed and submitted by the provider.
 - You only complete Step 5 after the patient completes treatment.
- Reach out to the state TB nurse/regional epi assigned to the case.
 - They will leave notes in the case once it's assigned.
 - They can advise you on the next steps.
- If you discover that the patient is hospitalized, reach out to the infection control team at the hospital they've been admitted to.
 - Discuss discharge plans.
- If you discover that the patient requires interpreter services...
 - Go to the **Care Plan/Follow-up** question package.
 - Select *Yes* on "Outreach Requested" and then select *Language support* for "Reason for referral".
 - You can also discuss with the TB nurse/epi assigned to the case.

What are my responsibilities?

- Coordinate medication management
- Recommend/help coordinate testing if case has close contacts
- Coordinate Directly Observed Therapy (DOT).
- If the patient is hospitalized, reach out to infection control and discuss discharge plans. Once they're discharged, the responsibilities begin.

What does medication management entail?

- TB medications and their dosage/frequency can vary, but treatment typically involves 6 or 9 month regimens of four first-line anti-TB drugs: Rifampin (RIF), Isoniazid (INH), Pyrazinamide (PZA), and Ethambutol (EMB). Together, this regimen is known as RIPE.
- RIPE regimens have two phases: intensive phase (2 months) and continuation phase (4 or 7 months).
- Shorter or longer treatment regimens are determined by the provider and are informed by drug-susceptibility results, coexisting medical conditions, potential for drug-drug interactions, and other factors.

| Intensive Phase | | | | Continuation Phase | | | | Total Doses | Comments ^{c,d,e,f} | Regimen Effectiveness |
|--------------------------|----------|--|--------------------------|--------------------|----------|-----------------------------|--------------------------|-------------|--|-----------------------|
| Drugs ^a | Duration | Frequency ^b | | Drugs | Duration | Frequency ^{b,c} | | | | |
| INH RIF PZA EMB | 8 weeks | 7 days/week for 56 doses | 5 days/week for 40 doses | INH RIF | 18 weeks | 7 days/week for 126 doses | 5 days/week for 90 doses | 182 to 130 | This is the preferred regimen for patients with newly diagnosed pulmonary TB. | |
| INH RIF PZA EMB | 8 weeks | 7 days/week for 56 doses | 5 days/week for 40 doses | INH RIF | 18 weeks | 3 times weekly for 54 doses | | 110 to 94 | Preferred alternative regimen in situations in which more frequent DOT during continuation phase is difficult to achieve. | |
| INH RIF PZA EMB | 8 weeks | 3 times weekly for 24 doses | | INH RIF | 18 weeks | 3 times weekly for 54 doses | | 78 | Use regimen with caution in patients with HIV and/or cavitory disease. Missed doses can lead to treatment failure, relapse, and acquired drug resistance. | |
| INH RIF PZA EMB | 8 weeks | 7 days/week for 14 doses then twice weekly for 12 doses ⁹ | | INH RIF | 18 weeks | 2 times weekly for 36 doses | | 62 | Do not use twice-weekly regimens in HIV-infected patients or patients with smear positive and/or cavitory disease. If doses are missed then therapy is equivalent to once weekly, which is inferior. | |

Source: <https://www.cdc.gov/tb/topic/treatment/tbdisease.htm>

What is DOT (Directly Observed Therapy)?

- DOT are appointments where a health care worker watches the TB patient take each dose of their prescribed medications.
- During these appointments, ask the patient about any problems or side effects they may be experiencing with the medications.
- These sessions can be conducted in-person or remotely by a licensed nurse.

- Taking **all** prescribed doses **each day** is essential for successful treatment outcomes.
- If too many doses are missed, treatment may need to be extended (or restarted entirely).