

Minnesota Department of Health

# Directly Observed Therapy (DOT) for the Treatment of Tuberculosis

National TB treatment guidelines strongly recommend using a patient-centered case management approach - including directly observed therapy ("DOT") - when treating persons with active TB disease. DOT is especially critical for patients with drug-resistant TB, HIV-infected patients, and those on intermittent treatment regimens (i.e., 2 or 3 times weekly).

## What is DOT?

DOT means that a trained health care worker or other designated individual (excluding a family member) provides the prescribed TB drugs and watches the patient swallow every dose.

## Why use DOT?

- We cannot predict who will take medications as directed, and who will not. People from all social classes, educational backgrounds, ages, genders, and ethnicities can have problems taking medications correctly.
- Studies show that 86-90% of patients receiving DOT complete therapy, compared to 61% for those on self-administered therapy.
- DOT helps patients finish TB therapy as quickly as possible, without unnecessary gaps.
- DOT helps prevent TB from spreading to others.
- DOT decreases the risk of drug-resistance resulting from erratic or incomplete treatment.
- DOT decreases the chances of treatment failure and relapse.

## Who can deliver DOT?

- A nurse or supervised outreach worker from the patient's county public health department normally provides DOT.
- In some situations, it works best for clinics, home care agencies, correctional facilities, treatment centers, schools, employers, and other facilities to provide DOT, under the guidance of the local health department.
- Family members should not be used for DOT. DOT providers must remain objective.

- For complex regimens including IV/IM medications or twice daily dosing, home care agencies may provide DOT or share responsibilities with the local health department.
- If resources for providing DOT are limited, priority should be given to patients most at risk. See the MDH "DOT Risk Assessment" form for help identifying high-priority patients ([www.health.state.mn.us/divs/idepc/diseases/tb/dottool.html](http://www.health.state.mn.us/divs/idepc/diseases/tb/dottool.html)).

## How is DOT administered?

- DOT includes:
  - delivering the prescribed medication
  - checking for side effects
  - watching the patient swallow the medication
  - documenting the visit
  - answering questions
  - notifying the physician if the patient has side effects, clinical problems or misses DOT visits.
- DOT should be initiated when TB treatment starts. Do not allow the patient to try self-administering medications and missing doses before providing DOT. If the patient views DOT as a punitive measure, there is less chance of successfully completing therapy.
- The prescribing physician should show support for DOT by explaining to the patient that DOT is widely used and very effective. The DOT provider should reinforce this message.
- DOT works best when used with a patient-centered case management approach, including such things as:
  - helping patients keep medical appointments
  - providing ongoing patient education
  - offering incentives and/or enablers
  - connecting patients with social services or transportation
- Patients taking daily therapy can usually self-administer their weekend doses.



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How can a DOT provider build rapport and trust?

1. “Start where the patient is.”
2. Protect confidentiality.
3. Communicate clearly.
4. Avoid criticizing the patient’s behavior; respectfully offer helpful suggestions for change.
5. Be on time and be consistent.
6. Adopt and reflect a nonjudgmental attitude.

For further information or assistance making referrals for DOT, contact the Minnesota Department of Health, TB Prevention and Control Program, (651) 201-5414.

### References:

1. Treatment of Tuberculosis, American Thoracic Society, CDC and Infectious Diseases Society of America, Am J Respir Crit Care Med, Vol 167, 2003 (on line at: [www.cdc.gov/mmwr/preview/mmwrhtml/rr5211a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5211a1.htm))
2. Interactive Core Curriculum on Tuberculosis (Web-based), CDC, 2004  
[www.cdc.gov/nchstp/tb/webcourses/corecurr/index.htm](http://www.cdc.gov/nchstp/tb/webcourses/corecurr/index.htm)
3. “DOT Essentials: A Training Curriculum for TB Control Programs”, Francis J. Curry National Tuberculosis Center, 2003
4. “Management: Directly Observed Therapy”, New York City Department of Health, 2001.