Information for Healthcare Providers: **Using Directly Observed Therapy (DOT) with TB Treatment**

"Responsibility for successful treatment is assigned to the health-care provider, not the patient"
-Core Curriculum on TB: What the Clinician Should Know (CDC, 2013)

DOT is a Recommended Public Health Practice

For tuberculosis (TB) treatment, directly observed therapy (DOT) involves a trained public health nurse delivering each dose of anti-tuberculosis medication to the patient, and observing the patient consume each dose. National guidelines recommend DOT as part of the standard of care for TB disease treatment.

DOT Improves Treatment Success

DOT is significantly associated with improved TB treatment success and increased sputum smear conversion. Participation in DOT can also help with early recognition of adverse drug reactions and treatment irregularities, as well as help providers to establish a rapport with their patients. DOT can also be used to treat latent TB infection (LTBI), which in turn prevents possible TB activation in the future.

DOT & Patient-Centered Care

DOT is more than watching a patient swallow their medication. Patient-centered care respects an individual's right to participate actively as an informed partner in decisions and activities related to their TB diagnosis and treatment. Decisions regarding DOT use must be made in concert with the patient. Unfortunately, DOT may not be feasible when resources are limited; in these instances, electronic DOT (eDOT) can be an alternative to in-person DOT.

Priority Situations to Use DOT

Risk Factors for Poor Adherence:

- Current or prior substance abuse
- Homelessness or unstable housing
- Poor or non-acceptance of TB diagnosis
- Children and adolescents
- Intermittent dosing regimen
- Resident at correctional or long-term care facility
- Previous treatment for active or latent tuberculosis
- Mental, emotional or physical disability
- Previous non-adherence to therapy

Likely to Transmit TB to Others:

- Positive sputum smears
- Delayed culture conversion (sputum obtained at/after completion of intensive phase is culture positive)

High Risk for Severe Outcomes:

- HIV infection
- Immunosuppression
- Adverse reaction to TB meds
- Treatment failure or relapse

MDHHS Michigan Department of Health & Human Services

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DOT Resources

Local health departments in Michigan should develop their own guidance for DOT. The State TB Control Program is available to answer any questions or to help with creating guidance. Below are a few resources that may help:

1. Michigan Department of Health and Human Services Website: Directly Observed Therapy (DOT): https://www.michigan.gov/mdhhs/0,5885,7-339-71550_5104_5281_46528_61218_78962_78980-508430--,00.html, accessed 9/19
2. Centers for Disease Control and Prevention (2013). Core Curriculum on Tuberculosis: What the Clinician Should Know, Sixth Edition: https://www.cdc.gov/TB/education/corecurr/pdf/corecurr_all.pdf, accessed 9/19
3. TB 101 for Health Care Workers: Lesson 6, Treatment of TB Disease. CDC: https://www.cdc.gov/tb/webcourses/tb101/page3832.html, accessed 9/19
4. Nahid P., et al., Official American Thoracic Society/Centers for Disease Control and Prevention/Infectious Diseases Society of America Clinical Practice Guidelines: Treatment of Drug-Susceptible Tuberculosis. Clin Infect Dis, 2016. 63(7): p. e147–95: https://academic.oup.com/cid/article/63/7/e147/2196792, accessed 9/19
5. Summary of the ATS/CDC/IDSA Clinical Practice Guidelines: Treatment of Drug-Susceptible Tuberculosis. Michigan Department of Health and Human Services, 2017: http://www.michigan.gov/documents/mdhhs/7._Treatment_guidelines_summary_554259_7.pdf, accessed 9/19
6. Implementing an Electronic Directly Observed Therapy (eDOT) Program: A Toolkit for Tuberculosis (TB) Programs, CDC; 2017: https://www.cdc.gov/tb/publications/pdf/tbedottoolkit.pdf, accessed 9/19