

## Information for Physicians Regarding Directly Observed Therapy (DOT) for Active Tuberculosis

### DOT is recommended public health practice<sup>1, 2</sup>

Directly Observed Therapy (DOT) involves a trained public health nurse or designate delivering each dose of anti-tuberculosis (TB) medication to the patient, and observing the patient consume each dose. Using DOT ensures timely completion of treatment, prevents further TB transmission, and prevents development of drug resistance. National guidelines recommend DOT as part of the standard of care for TB disease.

### DOT ensures adherence and treatment completion

When combined with case management, DOT improves completion of TB treatment, especially for patients who have risk factors associated with poor adherence. Each patient is paired with a DOT worker who visits the patient at their home or other prearranged site. The DOT worker watches the patient consume each dose of the prescribed TB medication. The DOT schedule is followed to ensure the patient receives the entire course and correct dose of medication. Electronic DOT (eDOT) can be an alternative to in-person DOT. In eDOT, the patient and their DOT worker use mobile phones or devices to document the consumption of each dose at the appropriate date and time. Skype is becoming a common method of performing eDOT.

### DOT helps your TB patients

Poor adherence to TB treatment is the main reason patients are not cured. Public health departments understand that private sector physicians generally do not have the resources to monitor whether their patients take their medications as prescribed. DOT is available to help ensure patient adherence and makes taking TB medication simpler for patients. DOT may help identify adverse medication reactions early, since a DOT worker sees the patient frequently.

### DOT protects public health

Public health professionals are responsible for safeguarding public health and preventing TB transmission. Working with all providers to help ensure that TB patients get the treatment they need and achieve cure is a state and national public health priority.

### Considerations for DOT

| Always use DOT  | Strongly Recommend DOT  |   |
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| <ul style="list-style-type: none"><li>• Intermittent TB treatment regimen</li><li>• Failing TB therapy</li><li>• TB drug resistance</li></ul> | <u>Risk Factors for Poor Adherence:</u> <ul style="list-style-type: none"><li>• Substance abuse</li><li>• Homelessness or unstable housing</li><li>• History of poor adherence with medications and medical management</li><li>• Poor or non-acceptance of TB diagnosis</li><li>• Major psychiatric disorder or cognitive problems</li><li>• Children 0-18 years of age</li><li>• Frail elderly</li></ul> | <u>Likely to transmit TB to others:</u> <ul style="list-style-type: none"><li>• Pulmonary TB with sputum AFB (+) smears at diagnosis</li><li>• Cavitory pulmonary disease</li></ul> <u>Patients at high risk for severe outcomes:</u> <ul style="list-style-type: none"><li>• HIV/AIDS</li><li>• Immunosuppression</li><li>• Too ill to self-manage</li><li>• Previous TB treatment</li><li>• Slow sputum conversion</li><li>• Adverse reaction to TB medications</li></ul> |

To find out more about DOT for your patients, contact your local public health department using the LHD listing on the back of the Michigan Local Health Jurisdiction Map.

1. 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) <http://www.cdc.gov/tb/publications/guidelines/Treatment.htm>
2. MIACET Guidelines revised 2012 <http://www.michigan.gov/tb>