State of California—Health and Human Services Agency

California Department of Public Health

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

DOT is recommended public health practice[1, 2]

Directly Observed Therapy (DOT) is a technique of delivering TB treatment to ensure timely completion of treatment, prevent further TB transmission, and prevent development of drug resistance. National guidelines recommend DOT as standard treatment for TB disease. Rates of relapse and development of acquired drug resistance have decreased when DOT is used.

DOT ensures adherence and treatment completion

When combined with case management, DOT improves completion of TB treatment when risk factors associated with poor adherence are present.[1] Each patient is assigned a DOT worker who visits the home or other prearranged site. The DOT worker watches the patient ingest and swallow each dose of the prescribed TB medication. The DOT schedule is repeated to ensure the patient receives the entire course and correct dose of medication. An alternative to DOT in selected patients is Electronic Observed Therapy, using video to observe TB patients as they ingest and swallow their TB medication without sending a TB worker to the field.[3]

DOT helps your TB patients

Poor adherence to TB treatment is one of the main reasons 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. In the event of limited resources, the following priority groups may be considered for the utilization of DOT resources.[4]

High risk for transmission or acquired drug resistance*	High risk for non-adherence	High risk for adverse events and/or poor outcomes
– Cavitary pulmonary disease – Positive AFB smear at diagnosis – Slow sputum conversion (>2 months or slow clinical improvement) – Clinical deterioration on treatment – Drug resistant TB* – Receiving intermittent TB medication regimen* – HIV infection, including those on anti-retroviral therapy*	– Non-adherence with TB regimen, past or present – Too ill to self-manage – Psychiatric disorder or memory impairment – Poor or non-acceptance of TB diagnosis or treatment – Poor adherence to initial medical management – Recent history of alcohol or drug abuse – Homeless/shelter resident or unstably housed – Recent history of incarceration	– TB disease relapse – Patients at higher risk for severe outcomes (e.g. with end stage renal disease, diabetes, or on tumor necrosis factor (TNF) alpha blocking agents) – Immunosuppression, post organ transplant – Children

To find out more about DOT for your patients, contact your local public health department.

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)
2) California Department of Public Health/California TB Controllers Association (CDPH/CTCA), Joint Guidelines, Guideline for the Treatment of Active Tuberculosis Disease, 4/15/2003
3) CDPH/CTCA Joint Guidelines, Guidelines for Electronic Directly Observed Therapy (eDOT) Program Protocols in California, 2016
4) CDPH/CTCA Joint Guidelines, Guidelines for Directly Observed Therapy Program Protocols in California, 2011

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