



## Tuberculosis Control Branch MDR TB Service Fact Sheet

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### **Mission Statement:**

The California Multidrug-Resistant Tuberculosis (MDR TB) Service was established in 2002 to enhance the prevention, detection, treatment, and management of MDR TB cases throughout the State of California.

### **What is MDR TB?**

Multidrug-resistant tuberculosis (MDR TB) is defined as TB disease that is resistant to at least isoniazid and rifampin, two of the most potent first-line anti-TB drugs. Extensively drug resistant (XDR TB) means TB resistant to isoniazid, rifampin, a fluoroquinolone, and a second-line injectable. Pre-XDR TB means MDR TB plus resistance to either a fluoroquinolone or a second-line injectable.

### **Background/Need**

Despite a decline in TB incidence in California over the past decade, MDR TB remains a challenge to TB control efforts and a threat to communities. On average, 1-2% of California's TB cases are MDR. Nearly half of MDR cases have substantial additional resistance (i.e., XDR, pre-XDR, or resistance to all four first line drugs). Because MDR TB has become more common globally, the proportion of cases that are MDR in California might increase in future years. In 2013 there were 26 MDR cases.

Because of higher morbidity and mortality, extended duration and cost of treatment, and overall complexity associated with MDR TB cases, local health jurisdictions (LHJs) face greater challenges with the management of MDR TB than with drug-sensitive disease. Familiarity and experience with managing MDR TB cases, access to timely drug susceptibility testing and second line drug procurement, and ability to minimize other case management challenges in the long term have been associated with prompt identification and successful treatment of MDR TB cases in California.

### **Purpose**

In an effort to support the local response to managing complex MDR TB cases, the TB Control Branch (TBCB) seeks to learn of each new case as soon as possible after MDR is diagnosed. The TBCB developed the MDR TB Service in 2002 to help local TB programs ensure that transmission of MDR TB is interrupted and each case has the best chance of cure. The Service provides support to LHJs on surveillance, clinical and case management, laboratory services and access to medications for treating MDR TB. Consultation is provided on both public health and clinical aspects pertaining to the management of MDR TB cases and their contacts. The Service will also provide consultation on cases that require an MDR regimen due to intolerance to Isoniazid and Rifampin.

### **MDR TB Service Team**

Physicians, nurse consultants, and an epidemiologist comprise the MDR TB Service. As a team, they bring a diverse set of skills, a multidisciplinary approach to the management of MDR TB and over 30 years of TB experience including:

- Front-line public health TB case management
- Understanding of local, state and national laboratory processes
- Private sector clinical experience
- Global public health perspectives
- Working relationship with a network of national MDR TB experts
- TB/HIV clinical and program experience
- Cultural competencies
- Board certification in Infectious Disease and Internal Medicine

For further information, please visit the Tuberculosis Control Branch online at <http://cdph.ca.gov/programs/tb>



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### Services

- Clinical consultation by telephone with comprehensive written recommendations
- Assistance obtaining and interpreting molecular and phenotypic drug susceptibility results
- Genotype interpretation for MDR cases
- Respiratory isolation recommendations to reduce transmission
- Recommendations for evaluating contacts and treating latent MDR TB infection
- Ongoing assistance in management of side effects, toxicity monitoring, and treatment adherence, with a goal of timely culture conversion and cure
- Information on obtaining second-line drugs and accessing patient assistance programs
- Consultations with other clinical experts on challenging treatment decisions
- Information regarding referrals to specialized centers, e.g., National Jewish Medical and Research Center
- Information and referral to other State resources (e.g., civil detention program, TB Medi-Cal, special needs funds, outbreak response team assistance)

### Resources

- MDR TB “tools:” drug-o-gram and other clinical monitoring tools, toxicity and bacteriology monitoring charts, contact evaluation and monitoring templates
- Clinical references related to specific challenges, e.g., treatment of contacts, use of fluoroquinolones in children, interpretation of drug levels and use of third-line drugs
- Contact and cost information for laboratories that perform susceptibility testing and therapeutic drug monitoring

### What is expected from you?

At a minimum, for each new MDR TB case in California TBCB requests that LHJs provide the following information via fax:

- Completed MDR/XDR TB report form
- Results of contact investigation

If full consultation is requested, TBCB will periodically request copies of:

- Treatment records, bacteriology, radiology and laboratory reports, and contact evaluation results

### To obtain an MDR TB Consultation, contact a MDR TB Service team member:

Pennan Barry, MD, MPH  
(510) 620-3041

[pennan.barry@cdph.ca.gov](mailto:pennan.barry@cdph.ca.gov)

Gayle M. Schack, RN, MS  
(510) 620-3048

[gayle.schack@cdph.ca.gov](mailto:gayle.schack@cdph.ca.gov)

Leslie Henry, RN, PHN  
(510) 620-3040

[leslie.henry@cdph.ca.gov](mailto:leslie.henry@cdph.ca.gov)

Neha Shah, MD, MPH  
(510) 620-3056

[neha.shah@cdph.ca.gov](mailto:neha.shah@cdph.ca.gov)

Christy Pak  
(510) 620-3004

[christy.pak@cdph.ca.gov](mailto:christy.pak@cdph.ca.gov)

Lisa True, RN, MS  
(510) 620-3054

[lisa.true@cdph.ca.gov](mailto:lisa.true@cdph.ca.gov)

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