

## **RNTCP Launches Cat IV (DOTS Plus) treatment for Multi-Drug Resistant TB**

Multi-drug resistant Tuberculosis (MDR-TB) is defined as resistance of *Mycobacterium tuberculosis* to Rifampicin and Isoniazid, two of the most effective anti-tubercular drugs for treatment of Tuberculosis. Drug resistant tuberculosis has frequently been encountered in India and its presence has been known virtually from the time anti-tubercular drugs were introduced for the treatment of TB. There have been a number of reports on drug resistance in India including state level Drug resistance surveillance (DRS) surveys conducted in Gujarat and Maharashtra. Data from these studies have found MDR-TB levels of about 3% in new cases and 12%-17% in re-treatment cases. Although the level of MDR-TB in the community is low in relation to percentages and proportions it translates into large absolute numbers. To address this issue the Revised National Tuberculosis Control Programme (RNTCP) has initiated the DOTS Plus strategy for appropriate management of MDR TB patients and to prevent the propagation and dissemination of MDR-TB.

The RNTCP views the treatment of MDR-TB patients as a "standard of care" issue. Recognizing that the diagnosis and treatment of MDR-TB cases is complex, RNTCP has developed national guidelines based on the WHO recommended international DOTS-Plus guidelines. These guidelines promote full integration of DOTS and DOTS-Plus activities under the RNTCP, so that patients with MDR-TB are both correctly identified and properly managed under the recommendations set out in this document.

As per the DOTS Plus strategy the diagnosis of MDR-TB will be made at the Intermediate Reference Laboratories (IRLs) accredited to perform culture and Drug Sensitivity Testing (DST). RNTCP has initiated the establishment of the laboratory network in a phased manner in all the states across the country with support from the four National reference Laboratories (TRC, Chennai; NTI, Bangalore; LRS Institute, New Delhi and JALMA, Agra). After diagnosis the treatment of MDR-TB patients is initiated at designated DOTS Plus sites which are established in tertiary care centres (like Medical Colleges, Large speciality hospitals) at least one in each state. The DOTS Plus sites have qualified staff available to manage patients, using standardized Cat IV regimen, using the second-line drugs, given under daily Directly Observed Treatment (DOT) and standardized follow-up protocols, have systems in place to deliver ambulatory DOT after an initial short period of in-patient care to stabilise the patient on the second-line drug regimen, and with a logistics system and standardized information system in place.

At the end of 2008 the DOTS Plus services are available in 7 states. Gujarat has been the first state to initiate DOTS Plus services in August 2007 followed by Maharashtra, Andhra Pradesh, Haryana Delhi, Kerala and West Bengal. It is planned to make available DOTS Plus services in all states by 2010 with complete geographical coverage by 2012.

### **Status of DOTS Plus activities at the end of 4Q2008**

<b>State</b>	<b>Date of Initiation</b>	<b>No. of MDR patients on treatment</b>
<b>Gujarat</b>	<b>August 2007</b>	<b>131</b>
<b>Maharashtra</b>	<b>September 2007</b>	<b>84</b>
<b>Andhra Pradesh</b>	<b>October 2008</b>	<b>25</b>
<b>Haryana</b>	<b>December 2008</b>	<b>6</b>
<b>Delhi</b>	<b>December 2008</b>	<b>3</b>
<b>West Bengal</b>	<b>December 2008</b>	<b>1</b>
<b>Kerala</b>	<b>December 2008</b>	<b>3</b>