

## WHO ready to tackle drug resistant TB

According to the World Health Organization (WHO), some forms of tuberculosis (TB) are a threat to the security and stability of global health.

To combat the spread of drug-resistant TB the WHO has devised a two-year plan that the organisation hopes will prevent hundreds of thousands of cases of drug-resistant TB and save as many as 134,000 lives worldwide.

The Global MDR-TB and XDR-TB Response Plan 2007-2008, sets out measures needed now to prevent, treat and control extensively drug-resistant TB (XDR-TB) and multi-drug-resistant TB (MDR-TB).

The plan also sets in motion actions to reach a 2015 goal of providing access to drugs and diagnostic tests to all MDR-TB and XDR-TB patients, saving the lives of up to 1.2 million patients.

Dr. Margaret Chan, WHO director-general, says drug-resistant TB is a global threat and if it is allowed to expand unchecked, the world faces the possibility of an epidemic of drug-susceptible TB being replaced by very drug-resistant TB.

The WHO says there may already be up to 30,000 cases a year of extensively drug-resistant TB (XDR-TB), a form virtually immune to antibiotics; XDR-TB has been reported in 37 countries in all regions of the world since emerging in 2006.

As many as 8.8 million people each year develop normal TB, a bacterial infection that usually attacks the lungs but another 450,000 people a year are infected with a multi-resistant form (MDR-TB) which is resistant to the main first-line drugs.

### Get the basics right

The WHO plans to emphasise the need to boost basic TB control and target investment in key areas, such as treatment programmes, diagnostic laboratories, and research into new drugs and vaccines.

Dr. Mario Raviglione, director of the WHO Stop TB Department, says the plan is ambitious and must be fully supported if a stranglehold is to be maintained on drug-resistant TB.

Dr. Paul Nunn, the plan's coordinator, also warns that if drug-resistant TB is allowed to spread unchecked, the world could be pushed back to a pre-antibiotic era with no real hope of a cure; as it is, says Dr. Nunn, around nine million new cases of tuberculosis occur each year, most of which are sensitive to the standard drugs.

Researchers raised the alarm over the growing threat of new strains of highly resistant TB over a year ago and those same concerns were then heightened six months later by a cluster of "virtually untreatable" cases in an area of South Africa with a high prevalence of HIV.

All but one of the 53 victims died in an average of 25 days after samples were taken for drug resistance tests; then in May this year a US citizen was found to have extensively drug-resistant TB while travelling

around Europe on his honeymoon.

The total budget for the two-year plan is US\$2.15bn, which is needed to ensure a steady supply of quality drugs to treat MDR-TB and XDR-TB in under served countries.

### **Estimated: 424 000 news cases of MDR-TB every year**

Dr. Marcos Espinal, Executive Secretary of the Stop TB Partnership says they are ensuring the supply of these drugs to a growing number of countries, after they meet the required technical standards and will clearly use the drugs correctly.

The Global MDR-TB and XDR-TB Response Plan 2007-2008 details activities to be carried out in all six WHO regions. Its eight main objectives are those recommended by the WHO Global Task Force on XDR TB, which met in October 2006.

MDR-TB is a form of TB that does not respond to the standard treatments and is defined as TB resistant to the main first-line drugs, isoniazid and rifampicin; there are an estimated 424 000 new cases of MDR-TB every year.

Multi-drug resistance emerges when there is mismanagement of drugs and under-investment in quality TB control; it can also be spread from one person to another.

The cost of treating MDR-TB can be 1000 times more than treating standard TB.

XDR-TB occurs when there is resistance to all of the most effective anti-TB drugs, and is defined as TB with MDR-TB resistance as well as resistance to any one of the fluoroquinolone drugs and to at least one of the three injectable second-line drugs, amikacin, capromycin and kanamycin.

Extensive drug resistance also emerges through mismanagement of MDR-TB and can also spread from one person to another.

There are an estimated 25,000 to 30,000 new cases of XDR-TB every year. So far, 37 countries have confirmed cases of XDR-TB.