Drug-resistant TB: definitions

- **Multidrug-resistant TB (MDR-TB)** is a form of TB caused by bacilli that are resistant to, at least, isoniazid and rifampicin.

- **Extensively resistant TB (XDR-TB)** is MDR-TB PLUS resistance to any fluoroquinolones, AND any one of the second-line injectable drugs (amikacin, kanamycin, capreomycin)
## Latest global TB estimates - 2007

<table>
<thead>
<tr>
<th>Category</th>
<th>Estimated number of cases</th>
<th>Estimated number of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>All forms of TB</td>
<td><strong>9.27 million</strong></td>
<td><strong>1.77 million</strong></td>
</tr>
<tr>
<td>Greatest number of cases in Asia; greatest rates per capita in Africa</td>
<td><strong>(139 per 100,000)</strong></td>
<td><strong>(27 per 100,000)</strong></td>
</tr>
<tr>
<td>Multidrug-resistant TB (MDR-TB)</td>
<td><strong>511,000</strong></td>
<td>~<strong>150,000</strong></td>
</tr>
<tr>
<td>Extensively drug-resistant TB (XDR-TB)</td>
<td>~<strong>50,000</strong></td>
<td>~<strong>30,000</strong></td>
</tr>
<tr>
<td>HIV-associated TB</td>
<td><strong>1.4 million (15%)</strong></td>
<td><strong>456,000</strong></td>
</tr>
</tbody>
</table>
New challenges require the Stop TB Strategy

The Global Plan 2006-2015 defines direction and costs

2006-2015: 60 billion US$ necessary to control TB in endemic countries

11 billion US$ necessary to develop new tools
The challenging problem

- 500,000 new MDR-TB cases estimated annually
- XDR-TB in more than 50 countries
- 5% of MDR-TB cases projected to be treated in 2009 and 3% only under GLC standards
- About 85% of the global MDR-TB burden in 27 countries
- Linkage with HIV in Africa not fully understood and potentially explosive

Estimated number of MDR-TB cases, 2007

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

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% MDR-TB among new cases 1994-2007

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* Sub-national coverage in India, China, Russia, Indonesia.
Countries with at least one confirmed XDR-TB case, as of March 2009

Argentina  Canada  Georgia  Japan  Myanmar  Philippines  Russian Federation  Ukraine
Armenia  China, Hong Kong SAR  Germany  Kenya  Namibia  Poland  Slovenia  United Arab Emirates
Australia  Colombia  India  Latvia  Nepal  Portugal  South Africa  United Kingdom
Azerbaijan  Czech Republic  Iran (Islamic Republic of)  Lesotho  Netherlands  Qatar  Spain  United States of America
Bangladesh  Ecuador  Ireland  Lithuania  Norway  Republic of Korea  Swaziland  Uzbekistan
Botswana  Estonia  Israel  Mexico  Oman  Republic of Moldova  Sweden  Viet Nam
Brazil  France  Georgia  Japan  Myanmar  Philippines  Russian Federation  Ukraine

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Control of M/XDR-TB is everybody's business!

Interventions require more than just TB programmes' efforts…

- Strengthen basic TB control, to prevent M/XDR-TB
- Scale-up programmatic management and care of M/XDR-TB respecting human rights
- Strengthen laboratory services for adequate and timely diagnosis of M/XDR-TB
- Ensure availability of quality drugs and their rational use
- Expand M/XDR-TB surveillance
- Introduce infection control, especially in high HIV prevalence areas
- Mobilize resources domestically and internationally
- Promote research and development of new diagnostics, drugs and vaccines
Bottlenecks to scale-up M/XDR-TB prevention and management

- Major gaps in TB control
- Extremely weak M/XDR-TB management and care
- Health workforce crisis
- Inadequate laboratories
- Quality of anti-TB drugs not assured
- No restriction of anti-TB drug use
- Absent infection control
- Insufficient research
- Major financial gaps
Solutions to MDR-TB lie in improved health systems

<table>
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<tr>
<th>Bottlenecks</th>
<th>Health System Building Blocks</th>
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<tr>
<td></td>
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</table>
Funding requirements 2009-2015
27 MDR-TB high-burden countries

Most of the funding required is in the European Region, followed by Asia. In Asia the funding is mainly required in China and India.
Global Plan vs. available funding
20 high MDR-TB burden countries

Data for Armenia, Azerbaijan, Belarus, Kyrgyzstan, Lithuania, Tajikistan, Ukraine not available to WHO

Funding available almost entirely accounted for by Russian Federation and South Africa
Aims of the ministerial meeting

- To strengthen political commitment and build engagement by governments, especially emerging economies, and the international community to control M/XDR-TB through better TB control and M/XDR-TB care.

- To use catalytically the event to (i) support countries to develop M/XDR-TB control plans and (ii) address the bottlenecks hampering progress.
Expected outcomes

• Significantly increased **commitment** to address MDR-TB at national level, with Ministries taking the lead in making **comprehensive plans** appropriate to their settings and systems

• Donors sensitized about needs of external **resources**

• **Call for Action** endorsed by all

• Progress towards the 2009 **WHA resolution**
Mobilization, action, and plans in Countries

Action ahead: post-Beijing

WHA May 2009

PHS June 2009

Global tuberculosis control & patient care

AN ANCIENT DISEASE HAS TAKEN A DEADLY NEW FORM

SPREAD THE STORY. STOP THE DISEASE.

XDRTB.ORG
WE ARE THE TREATMENT

BD TED RESULTS

PACIFIC HEALTH SUMMIT
SEATTLE

World Health Organization
To end this scourge is a mere question of civilization  
(Jorge Sampaio, UN SE to Stop TB)

Many thanks to all