XDR-TB
Extensively Drug-Resistant Tuberculosis

What, Where, How and Action Steps…
Countries with XDR-TB
Confirmed cases to date

Argentina
Armenia
Azerbaijan
Bangladesh
Brazil
Canada
Chile
China, Hong Kong SAR
Czech Republic
Ecuador
Estonia
France
Georgia
Germany
Ireland
Islamic Republic of Iran
Israel
Italy
Japan
Latvia
Lithuania
Mexico
Netherlands
Norway
Portugal
Republic of Korea
Romania
Russian Federation
Slovenia
South Africa
Sweden
UK
USA

Based on information provided to WHO Stop TB Department 1 May 2007
Emergence of XDR-TB
March 2006

Of 17,690 isolates from 49 countries during 2000-2004, 20% were MDR-TB and 2% were XDR-TB. XDR = Multidrug-resistant TB (MDR-TB) plus resistance to (i) any fluoroquinolone, and (ii) at least 1 of 3 injectable second-line drugs capreomycin, kanamycin, amikacin (new definition agreed October 2006)

MDR-TB = resistance to at least isoniazid and rifampicin, the two most powerful first-line anti-TB drugs

XDR-TB found in:
USA: 4% of MDR-TB
Latvia: 19% of MDR-TB
S Korea: 15% of MDR-TB
Given the underlying HIV epidemic in Africa, drug-resistant TB could have a major impact on mortality and requires urgent action on care and prevention.
WHO Stop TB Strategy addresses drug resistance by strengthening TB control

1. PURSUE HIGH-QUALITY DOTS EXPANSION AND ENHANCEMENT
   a. Political commitment with increased and sustained financing
   b. Case detection through quality-assured bacteriology
   c. Standardized treatment with supervision and patient support
   d. An effective drug supply and management system
   e. Monitoring and evaluation system, and impact measurement

2. ADDRESS TB/HIV, MDR-TB AND OTHER CHALLENGES
   - Implement collaborative TB/HIV activities
   - Prevent and control multidrug-resistant TB
   - Address prisoners, refugees and other high-risk groups and special situations

3. CONTRIBUTE TO HEALTH SYSTEM STRENGTHENING
   - Actively participate in efforts to improve system-wide policy, human resources, financing, management, service delivery, and information systems
   - Share innovations that strengthen systems, including the Practical Approach to Lung Health (PAL)
   - Adapt innovations from other fields

4. ENGAGE ALL CARE PROVIDERS
   - Public-Public, and Public-Private Mix (PPM) approaches
   - International Standards for TB Care (ISTC)

5. EMPOWER PEOPLE WITH TB, AND COMMUNITIES
   - Advocacy, communication and social mobilization
   - Community participation in TB care
   - Patients’ Charter for Tuberculosis Care

6. ENABLE AND PROMOTE RESEARCH
   - Programme-based operational research
   - Research to develop new diagnostics, drugs and vaccines
The Stop TB Strategy strengthens TB control, preventing the emergence of drug-resistant TB...

...and underpins the Stop TB Partnership’s Global Plan to Stop TB 2006-2015, to treat 50 million patients and save 14 million lives
"Priority for the immediate strengthening of TB control in countries"

- Accelerate access to rapid tests for rifampicin resistance
- Ensure adherence to WHO drug resistance guidelines, improve programme management, access to MDR-TB drugs under proper conditions including direct observation. Ensure all patients with HIV are adequately treated for TB and started on antiretroviral therapy
- Accelerate implementation of infection control measures to reduce transmission especially among those HIV positive
- Strengthen laboratory capacity to diagnose, manage and survey drug resistance. Commence rapid survey so that the size of the XDR-TB epidemic can be determined
- Initiate information-sharing strategies that promote prevention, treatment and control of XDR-TB
## Resources needed in 2007 for a global response to the XDR-TB emergency

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<th>Item</th>
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<tr>
<td>Global and regional coordination and technical support</td>
<td>42 million</td>
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<tr>
<td>Financial needs at country level</td>
<td>604 million</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>646 million</strong></td>
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XDR-TB
The Facts

- Drug-resistant TB poses a grave public health threat especially in populations with high HIV rates

- XDR-TB occurs as a result of poorly-managed TB control programmes

- XDR-TB, if identified early, can be treated and cured in some cases under proper TB control conditions, based on the experiences in a few successful programmes where HIV prevalence was low

- Infection control measures must be strengthened everywhere, and especially where HIV prevalence is high, to protect the vulnerable and those at risk of XDR-TB

- XDR-TB strains have been found in all regions of the world, although still thought to be uncommon

- XDR-TB underlines the need for investment in the development of new TB diagnostics, treatments and vaccines, since the current tools are outdated and insufficient
"We will build greater momentum to control malaria, TB and neglected diseases"

Dr Margaret Chan  
WHO Director-General Elect  
Acceptance speech to the World Health Assembly

"WHO Stop TB, with full resources in place, will ensure the response to the XDR-TB emergency is effective and robust"

Dr Mario Raviglione  
WHO Director  
Stop TB Department

"WHO is absolutely committed to supporting country efforts to fight TB in all forms"

Dr Anders Nordström  
WHO Acting Director-General  
Address to the Global Task Force on XDR-TB
XDR-TB
For more information:

**WHO Stop TB:**
for latest XDR-TB data, country reports, monthly updates, guidelines, FAQs,

[www.who.int/tb](http://www.who.int/tb)

Email: [thomasg@who.int](mailto:thomasg@who.int)

**Stop TB Partnership:**
for information on XDR-TB activities of the Partnership's Working Groups and its 500 partners

[www.stoptb.org](http://www.stoptb.org)

Email: [stoptbinfo@who.int](mailto:stoptbinfo@who.int)