



World Health  
Organization



# TUBERCULOSIS

## MDR-TB & XDR-TB

### THE 2008 REPORT

#### ANTI-TUBERCULOSIS DRUG RESISTANCE IN THE WORLD

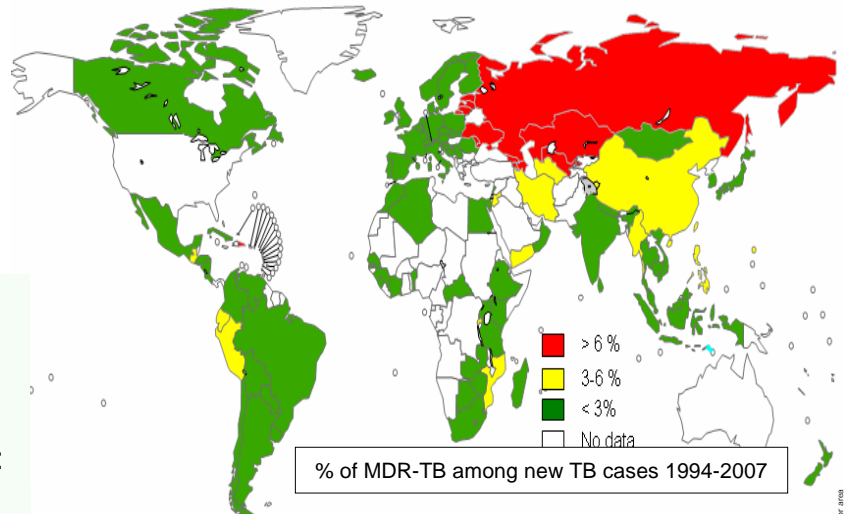
- Data from 81 countries and 91,577 patients
- Collected in 2002-2006
- Trend data available from 47 countries
- Data reported from areas that represent 35% of all notified smear-positive TB cases

#### MDR-TB Survey Findings:

- MDR-TB, on average, in 5.3% of all TB cases
- The 14 areas with MDR-TB rates among new cases greater than 6%:

1. Azerbaijan, Baku City (22.3%)
2. Moldova (19.4%)
3. Ukraine, Donetsk (16%)
4. Russia, Tomsk (15%)
5. Uzbekistan, Tashkent (14.8%)
6. Estonia (13.3%)
7. Russia, Mary El (12.5%)
8. Latvia (10.8%)
9. Lithuania (9.8%)
10. Armenia (9.4%)
11. Russia, Orel (8.8%)
12. China, Inner Mongolia (7.3%)
13. China, Heilongjiang (7.2%)
14. Georgia (6.8%)

- Increases in Republic of Korea, Peru, and in Orel and Tomsk in Russia
- Stabilizing in the Baltic countries
- Decreases in Hong Kong and USA
- Only 6 countries in Africa were able to provide data
- Linkage of HIV and MDR-TB detected in Latvia and in Donetsk, Ukraine



#### Conclusions:

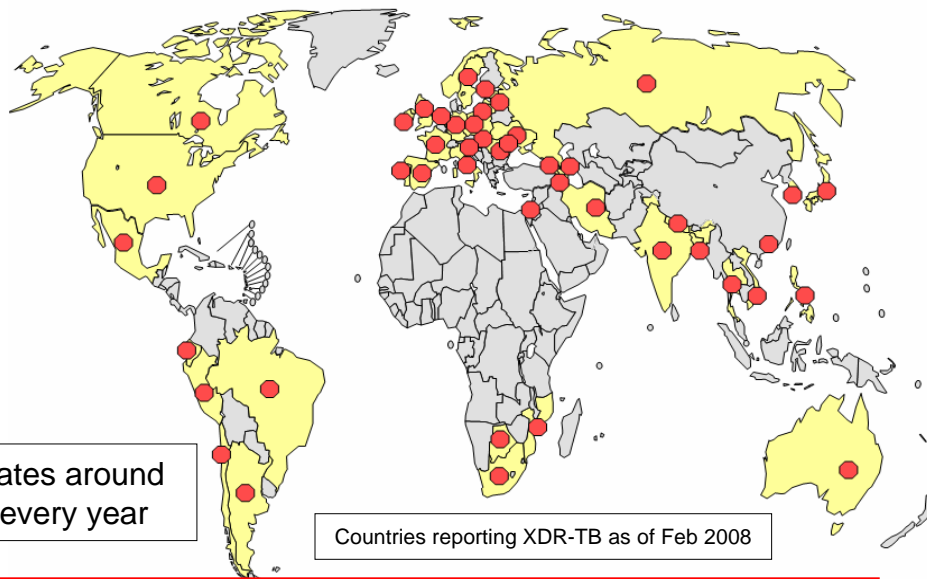
- **Highest rates ever recorded** of MDR-TB
- **Highest rates** are in countries of the former Soviet Union and China
- **Severely limited laboratory capacity** has meant limited data availability in Africa
- **Insufficient efforts** in many areas of the world to treat and control MDR-TB
- Equipment to **rapidly diagnose** MDR-TB in 1 week instead of 3 months exists but most patients cannot access such services
- **XDR-TB in 45 countries** threatens to derail 10 years of progress in TB control and HIV management
- **Extraordinary measures** are needed in Eastern Europe: rapid detection, effective care, access to drugs

Based on the data, WHO estimates 490,000 MDR-TB cases emerge every year, with more than 110,000 deaths

## XDR-TB CONFIRMED IN 45 COUNTRIES

### XDR-TB Survey Findings:

- Representative data from 35 countries
- 45 countries with at least one case confirmed
- In former Soviet Union countries, proportions of XDR-TB among MDR-TB range from 4% in Armenia, to almost 24% in Estonia



Based on the data, WHO estimates around 40,000 XDR-TB cases emerge every year

## THE GLOBAL RESPONSE TO MDR-TB AND XDR-TB

Strengthening TB control through the Stop TB Strategy prevents MDR-TB and XDR-TB. The Global Plan to Stop TB 2006-2015 outlines the actions needed to prevent drug-resistant TB and treat all diagnosed MDR-TB patients by 2015.

2008 estimated costs and results for the MDR-TB and XDR-TB response in the Global Plan to Stop TB	
<b>Patients treated:</b>	<b>125,000</b>
<b>Costs:</b>	<b>US\$ 1 billion</b>
<b>Financing gap:</b>	<b>US\$ 500 million</b>

- Principal actions proposed by the WHO Global Task Force on XDR-TB
1. Strengthen TB control through the Stop TB Strategy
  2. Scale-up MDR-TB and XDR-TB programmes
  3. Expand and improve laboratory services
  4. Expand MDR-TB and XDR-TB surveillance
  5. Prevent transmission through infection control
  6. Increase awareness and information
  7. Pursue funding and resources
  8. Promote research and development

## WHAT IS MDR-TB & XDR-TB?

- Drug-resistant TB is widespread and found in all countries surveyed. It emerges as a result of treatment mismanagement, and is passed from person to person in the same way as drug-sensitive TB.
- Multidrug-resistant TB (MDR-TB) is a form of TB that does not respond to the standard six month treatment using first line-drugs (i.e. resistant to isoniazid and rifampicin). It can take two years to treat with drugs that are more toxic, and 100 times more expensive. If the drugs to treat MDR-TB are mismanaged, further resistance can occur.
- Extensively drug-resistant TB (XDR-TB) is a form of TB caused by bacteria resistant to all the most effective drugs (i.e. MDR-TB plus resistance to any fluoroquinolone and any of the second-line anti-TB injectable drugs: amikacin, kanamycin or capreomycin).