**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

**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).