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GLOBAL EDUCATION



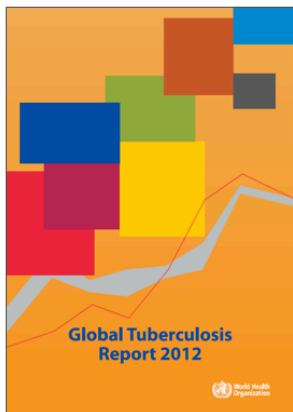
Global Burden of Tuberculosis

- Burden, Strategy and Progress -

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Overview



- ✓ **Burden of TB, TB/HIV, MDR-TB**
- ✓ **Strategy and targets**
- ✓ **Impact of interventions, and progress in control and care**

The Global Burden of TB -2011

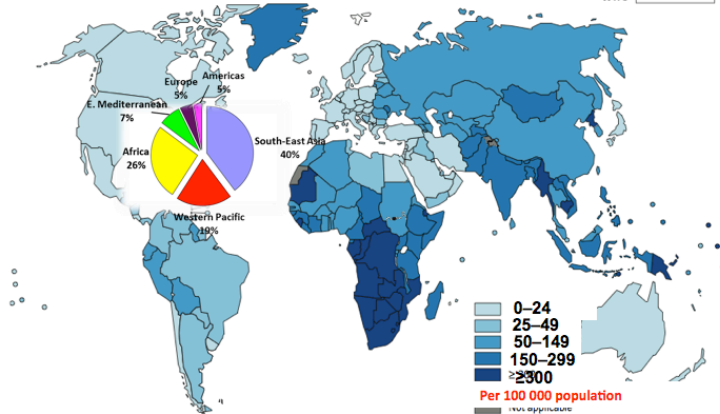


	Estimated number of cases	Estimated number of deaths
All forms of TB	8.7 million (8.3–9.0 million)	1.4 million* (1.3–1.6 million)
HIV-associated TB	1.1 million (13%) (1.0–1.2 million)	430,000 (400,000–460,000)
Multidrug-resistant TB	630,000 (460,000–790,000) out of ~12 million prevalent TB cases	Unknown, but probably > 150,000

Source: WHO Global Tuberculosis Report 2012

* Including deaths attributed to HIV/TB

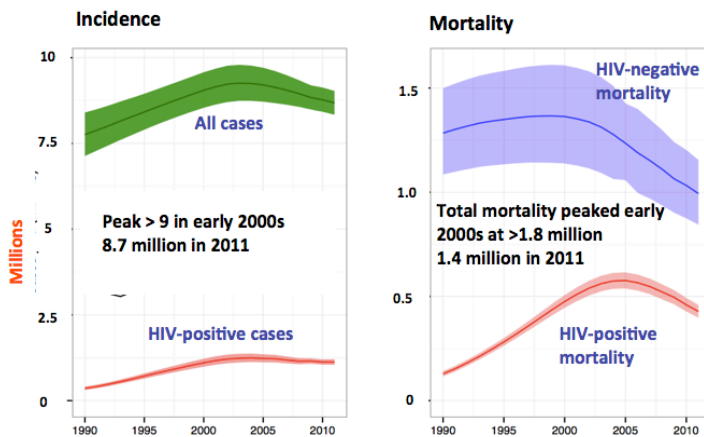
Incidence rates, 2011



Highest rates in Africa, linked to high rates of HIV infection
~80% of HIV+ TB cases in Africa



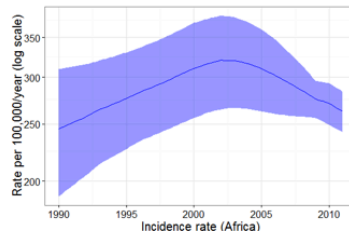
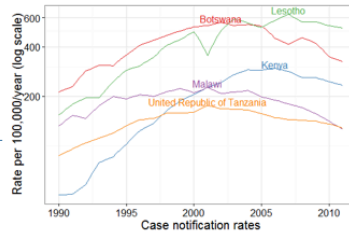
TB cases and deaths, 1990–2011 absolute numbers



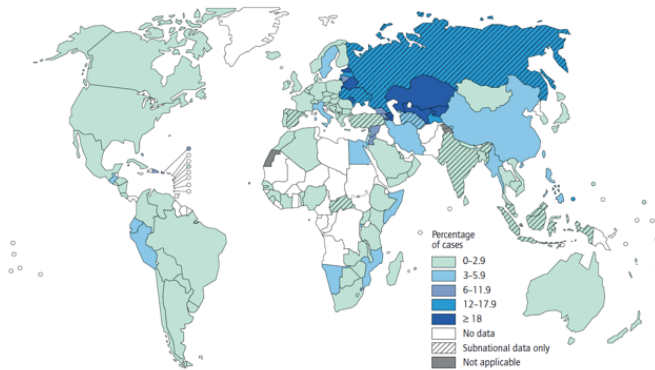
TB/HIV co-infection: 80% of burden in Africa



- ✓ TB leading cause of death in PLHIV
- ✓ 1/3 of PLHIV worldwide die due to TB.
- ✓ PLHIV infected with TB 20-40 times more likely to develop active TB.
- ✓ Untreated, TB in PLHIV leads to death in weeks
- ✓ 80% of all TB/HIV cases are in Africa



Distribution of proportion of MDR among new TB cases, 1994-2011



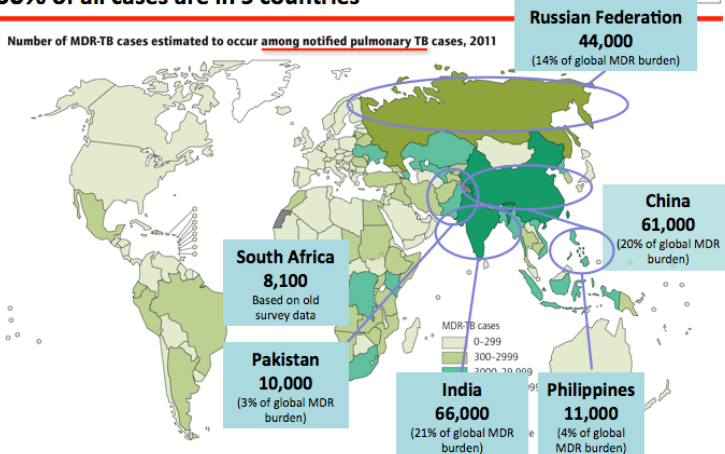
* Figures are based on the most recent year for which data have been reported, which varies among countries.

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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Estimated number of MDR-TB Cases, 2011 >60% of all cases are in 5 countries

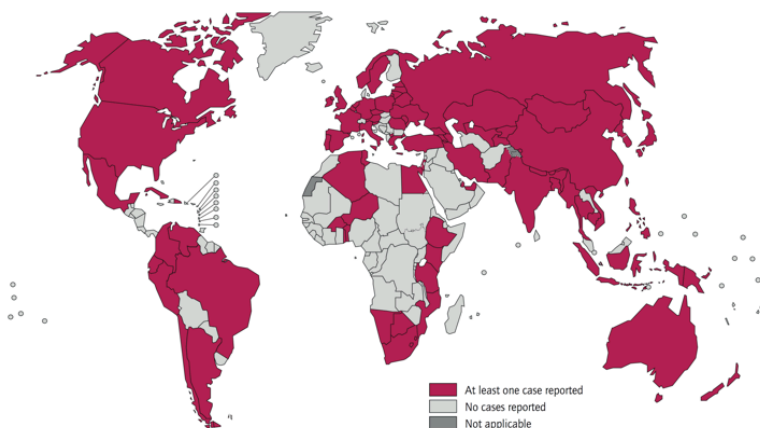


Number of MDR-TB cases estimated to occur among notified pulmonary TB cases, 2011



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To date, 84 countries have reported at least one XDR-TB case



About 9% of MDR-TB cases are XDR

The case of Mumbai and the “TDR-TB outbreak”



Correspondence

Totally Drug-Resistant Tuberculosis in India

To the Editors—Three years after extensively drug-resistant (XDR) tuberculosis was first described in 2006, Velazquez et al [1] drew attention to the emergence of totally drug-resistant (TDR) tuberculosis. The latest WHO global estimate of 110 132 cases of XDR tuberculosis from India in 2006, counts for 20% of the world tuberculosis load [3]. Although INHCE has been a tremendous success, it has been a tremendous challenge to treat patients with XDR tuberculosis. Since the first cases of XDR tuberculosis in India, Clin Infect Dis. 2012 Feb 15;54(4):579–81.

individually and often in incorrect doses, from multiple private practitioners during a 18-month attempt to cure their resistant (MDR) tuberculosis.

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Since the first cases of XDR tuberculosis in India, Clin Infect Dis. 2012 Feb 15;54(4):579–81.

Note

EMERGING INFECTIOUS DISEASES

Volume 18 Number 11 November 2012

Challenges and Controversies in Defining Totally Drug-Resistant Tuberculosis

Online Report

Challenges and Controversies in Defining Totally Drug-Resistant Tuberculosis

Article Contents

Online Report

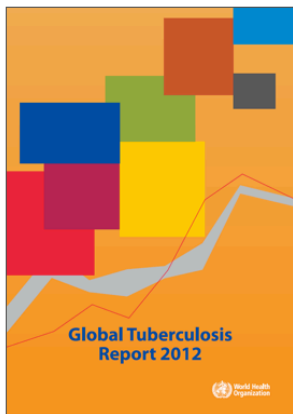
References

Suggested Citation

Abstract

In March 2012, in response to reports of tuberculosis (TB) resistant to all anti-TB drugs, the World Health Organization convened an expert consultation that identified issues to be used

Overview



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The Global TB Control Targets



2015: Goal 6: Combat HIV/AIDS, malaria and other diseases

Target 6c: to have halted by 2015 and begun to reverse the incidence...

*Indicator 6.9: incidence, prevalence and mortality associated with TB

*Indicator 6.10: proportion of TB cases detected and cured under DOTS



2015: 50% reduction in TB prevalence and deaths compared to 1990

2050: elimination (<1 case per million population)

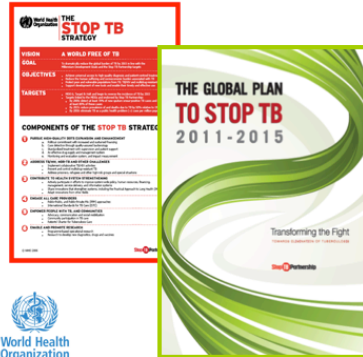
The global response:

Stop TB Strategy & Global Plan

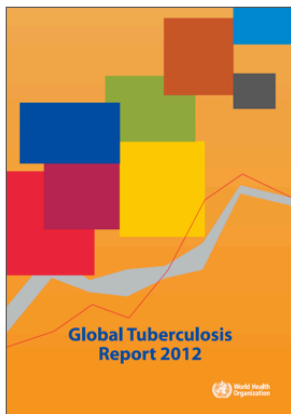


1. Pursue high-quality DOTS expansion
2. Address TB-HIV, MDR-TB, and needs of the poor and vulnerable
3. Contribute to health system strengthening
4. Engage all care providers
5. Empower people with TB and communities
6. Enable and promote research

To save lives, prevent suffering, protect the vulnerable, & promote human rights

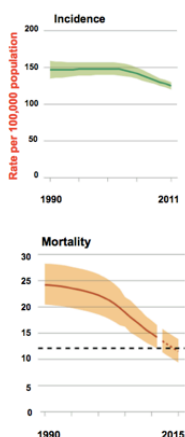


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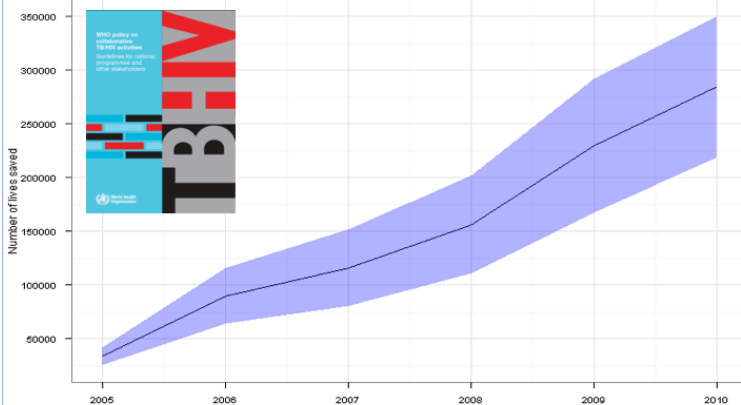
Global Progress on impact



- ✓ 51 million patients cured, 1995-2011
- ✓ 20 million lives saved since 1995
- ✓ 2015 MDG target on track: global TB incidence rate peaked in early 2000s
- ✓ BUT, TB incidence declining too slowly, 1.4 million people still dying, MDR-TB response slow, gaps in financing



Estimated lives saved 2005-2010 through collaborative TB/HIV interventions



Cumulative 2005-10= 910,000 (800,000 – 1,100,000)

Global Report 2012 – main conclusions



- ✓ 51 million cured and 20 million lives saved since 1995
- ✓ Progress towards international targets evident
- ✓ TB death rate decreased by 41% compared to 1990
- ✓ Progress on some TB/HIV indicators

But...

- ✓ Still 8.7 million cases and 1.4 million deaths
- ✓ Incidence decline very slow
- ✓ Small progress on MDR-TB response
- ✓ Major financing gap in both implementation and R&D

What are the challenges in 2012 if we target "elimination"?



1. Funding not secure; catastrophic expenditure for the poor
2. Only 2/3 of estimated cases reported or detected (late)
3. TB/HIV major impact in Africa
4. MDR-TB, with high burden in former USSR and China
5. Un-engaged non-state practitioners and communities
6. Weak health policies, systems and services
7. Social and economic determinants maintain TB
8. Research awakening: old diagnostics, drugs and vaccines

