Tuberculosis
An Opportunity to Reach Zero Deaths in our Lifetime

Dr Aaron Motsoaledi, Minister of Health, South Africa
Meeting of the Delegations of Member States of the WHO African Region
17th May 2014
Which disease is responsible for the most global deaths in the last 200 years?
“The world has made defeating AIDS a top priority. This is a blessing. But TB remains ignored. Today we are calling on the world to recognize that we can't fight AIDS unless we do much more to fight TB as well.”

- Nelson Mandela

2004 International AIDS Conference – Bangkok, Thailand
The Stop TB Partnership

- Unique international body

- More than 1200 partners in 100 countries including civil society, people affected by TB and TB/HIV, private sector, governments, donors, technical agencies

- Founded in 2001 - mission to serve every person who is vulnerable to TB and ensure that high-quality diagnosis, treatment and care is available to all who need it.

- Governed by the Stop TB Partnership Coordinating Board
the achievements
TB Incidence – Current Progress Would Take Until 2180 to Reach Target

Current Progress = Too Slow?

Post 2015 Strategy Target

Global TB incidence

target
10 / 100k

global
125 / 100k

year

2000  2010  2020  20
The TB Burden - 3 Million Missing Globally

8.6 MILLION
estimated TB cases

5.7 MILLION
new cases diagnosed and treated

MDR-TB
450,000
estimated new cases

77,000
MDR-TB cases diagnosed and on treatment
New Tuberculosis (TB) Cases, 22 High-Burden Countries (HBCs), 2012

India: 2,200,000
China: 1,000,000
South Africa: 530,000
Indonesia: 460,000
Pakistan: 410,000
Bangladesh: 350,000
Philippines: 260,000
Ethiopia: 230,000
Congo (Dem. Republic of): 210,000
Myanmar: 200,000
Nigeria: 180,000
Mozambique: 140,000
Viet Nam: 130,000
Russian Federation: 130,000
Kenya: 120,000
Brazil: 92,000
Thailand: 80,000
Tanzania (United Rep. of): 79,000
Zimbabwe: 77,000
Uganda: 65,000
Cambodia: 61,000
Afghanistan: 56,000

Total New TB Cases in the 22 High-Burden Countries = 7,000,000

Based on WHO, Global Tuberculosis Report; 2013.
TB incidence rates per 100,000 popn
(estimated for 2012)
## BRICS & selected SADC countries / 100,000 population

<table>
<thead>
<tr>
<th>Country</th>
<th>Incidence</th>
<th>Prevalence</th>
<th>HIV+ Incident Cases</th>
<th>Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>1,000</td>
<td>857</td>
<td>63</td>
<td>59</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>562</td>
<td>433</td>
<td>71</td>
<td>33</td>
</tr>
<tr>
<td>Mozambique</td>
<td>552</td>
<td>553</td>
<td>60</td>
<td>53</td>
</tr>
<tr>
<td>DR Congo</td>
<td>327</td>
<td>576</td>
<td>8</td>
<td>54</td>
</tr>
<tr>
<td>India</td>
<td>176</td>
<td>230</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>Tanzania</td>
<td>165</td>
<td>176</td>
<td>41</td>
<td>13</td>
</tr>
<tr>
<td>Russia</td>
<td>91</td>
<td>121</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>China</td>
<td>73</td>
<td>99</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Brazil</td>
<td>46</td>
<td>59</td>
<td>17</td>
<td>3</td>
</tr>
</tbody>
</table>

27 high MDR-TB burden countries in 2012

55% in Europe (15)
30% in Asia (8)
15% in Africa (4)

WHO 2013 Global Tuberculosis Report;
Why is MDR a public health crisis?

Less than 25% of estimated new MDR cases were detected in 2012

- Est. number of ALL MDR TB cases in the World today
- Est. number of NEW MDR TB cases per year
- New cases diagnosed
- New cases on treatment

17,000 patients on waiting list for treatment
The cost of drugs for TB is 40 USD/treatment duration.

The costs of drugs for MDR TB is between 5000 and 15000 USD/ treatment duration.

Despite drug-resistant TB comprising only 2.2 percent of South Africa’s case burden, it consumed around 32 percent of the total estimated 2011 national budget of US $218 million.

In the United States, the cost of for one XDR-TB patient is estimated to average $483,000 - twice the cost for MDR-TB.
Return on investment for every one dollar spent on the most cost-effective health interventions

- Tuberculosis case finding & treatment: US$ 30
- Heart attacks: US$ 25
- Expanded immunization: US$ 20
- Local surgical capacity: US$ 10
- Malaria prevention & treatment: US$ 20
- HIV combination prevention: US$ 12

the burden of missed cases

If untreated 1 TB case infects up to 10 people a year

We can not chose the air we breathe
TB in the Africa Region

- Over 1 in 4 TB of global deaths and new cases
- Less than 6 in 10 cases detected
- With current rate of progress, Africa unlikely to meet Stop TB 2015 Targets on Mortality and Prevalence
The burden

Estimated TB incidence rates (2012)
Africa - highest in the world

Circulation migration + high HIV + highest TB incidence in the world + financing gaps = Significant challenge
### Impact of the burden

<table>
<thead>
<tr>
<th>Disease, Injury or condition</th>
<th>Proportion of total DALYs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV/AIDS</td>
<td>30.9%</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>3.7%</td>
</tr>
<tr>
<td>[Combined]</td>
<td>[34.6%]</td>
</tr>
<tr>
<td>Interpersonal violence or injury</td>
<td>6.5%</td>
</tr>
<tr>
<td>Road Traffic Injury</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

Source: Medical Research Council - MRC
Focus areas

• Three key, underserved populations:
  – People living with MDR-TB
  – Inmates in correctional facilities
  – Miners and peri-mining communities
Budget by service delivery area

Budgetary allocation

- 5.1 MDR-TB: 36%
- 5.2. Correctional facilities: 29%
- 5.3. Mining sector: 23%
- 6.1 Programme management, administration and overheads: 12%
South Africa’s mines – Head of the TB snake in SADC

- 41,810 cases of active TB in South African mines every year (8% of national total, 1% of population)
- Highest incidence of TB in any other working population in the world
- 500,000 miners, plus 230,000 partners and 700,000 children are directly affected (SA mines)
- 20% of partners and children in Lesotho, Mozambique and Swaziland
- 59,400 orphans are currently in care as a result of TB related deaths in mining (plus 144,000 from HIV)
- 9.6 million work days lost each year to TB
TB and Mining: A Historic Chance to Stop TB

Of 2.3 million annual new TB cases in Africa, 760,000 (33%) are connected to Mining.

SADC Heads of State signed a declaration on TB and Mining in August 2012.

South Africa convened a TB and Mining Ministerial Conference in Johannesburg on March 25, 2014.

A regional application to the Global Fund is being developed to accelerate action against TB in Miners.
Death among miners from TB and Accidents - 2009

<table>
<thead>
<tr>
<th>Sub/Sector</th>
<th>Fatalities (Accidents)</th>
<th>Estimated TB cases</th>
<th>Estimated TB related deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining Sector</td>
<td>167</td>
<td>24,590</td>
<td>1,598</td>
</tr>
<tr>
<td>Gold sub-sector</td>
<td>80</td>
<td>17,591</td>
<td>1,143</td>
</tr>
</tbody>
</table>

Source: Department of Mineral Resources (DMR) & National Institute of Occupational Health (NIOH)
Planned activities in the mines

• Ensure access for more than 500,000 miners to regular TB prevention, screening and treatment through:
  – Strengthened regulatory framework (review current legislation)
  – Increased capacity of Medical Bureau for Occupational Diseases (MBOD) to enforce compliance by mines using multi-disciplinary inspections including officials from Departments of Mineral Resources & Labour
  – Effective surveillance & reporting system
  – Regional Ministerial summit on TB in the mines to be hosted by the Deputy President on 24 March
Focus on communities neighbouring mines
Planned activities in peri-mining communities

• Increase TB/HIV awareness in peri-mining with high concentrations of mines
• Increase access to TB/HIV prevention, diagnosis, and treatment in peri-mining communities in 6 districts with high concentration of mines by introduction of mobile units with genexpert for TB/HIV screening, counselling, testing services
we must
act now
to end TB
Post-2015 TB Strategy
Proposed Pillars and Principles

- Integrated, patient-centered TB care and prevention
- Bold policies and supportive systems
- Intensified research and innovation

Government stewardship and accountability, with monitoring and evaluation
Building a strong coalition with civil society and communities
Protecting and promoting human rights, ethics and equity
Adaptation of the strategy and targets at country level, with global collaboration
Projected acceleration of TB incidence decline to target levels

Optimize current tools, pursue universal health coverage and social protection

Introduce new vaccine, new prophylaxis

Current global trend: -2%/year

Average -10%/year

Average -17%/year

Average -5%/year
What we need more of

> Greater attention to TB
1. Commitment by Heads of State
2. Support from Country Parliaments and Finance Ministers
3. Ambitious goals for TB in the post-MDGs agenda

> Increased funding
1. Close the US $930 million funding gap for TB in AFR Region
2. Prioritize TB in National Plans and Global Fund Applications

> New Approaches / Innovations
1. Focus and address TB, MDR TB and TB/HIV in vulnerable groups (miners, peri mining communities, prisoners, migrants…)
2. Implement and scale up Active Case Finding - find all the undetected TB cases and treat them

 Engage and support the development of the new Global Plan to Stop TB 2016-2020 based on the Strategy