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Coordinating Board

Global Task Force on TB Impact Measurement

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Task Force mandate

- To produce robust, rigorous, widely-endorsed assessment of whether 2015 targets are achieved at global level, regional and country levels

- To regularly report on progress towards impact targets in years leading up to 2015

- To strengthen national capacity in monitoring and evaluation of TB control
3 strategic areas of work

- **Strengthening surveillance** of cases and deaths in all countries, with ultimate goal of direct measurement from notification and vital registration data

- **National TB prevalence surveys** in ≥ 21 global focus countries

- **Periodic review and revision of methods** used to translate surveillance and survey data into estimates of disease burden
Progress since Johannesburg CB 2010: main messages

- **Prevalence of TB disease surveys**: major global momentum achieved - must be sustained in the critical years of 2012 and 2013

- **Surveillance/M&E**: Accelerated progress since mid-2011, facilitated by intensified WHO-CDC collaboration and continued joint efforts with Global Fund – potential needs to be fully realised

- **Methods**: Further progress on direct measurement of mortality, notably in China and India

**Funding**: USAID, Japan, Global Fund, DFID, Stop TB Partnership
Prevalence surveys major global momentum

Underpinned by "AA" collaboration + global coordination among international technical and financial partners

Global focus countries (GFC) selected by Task Force

Asia - GFC
Africa - GFC
Other
Substantial reductions in TB cases and deaths in China, 1990–2010

Incidence and notifications

- Incidence falling 3.4%/year
- Halved in 20 years

Prevalence

Mortality

Cut almost 80%
Ethiopia 2010/11
first survey in Africa in 50 years following WHO guidelines

<table>
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<tr>
<th>Age Group</th>
<th>Sm+ (per 100,000)</th>
<th>Bacteriologically+ (per 100,000)</th>
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<tr>
<td>≥15 years</td>
<td>108 (73–143)</td>
<td>277 (208–347)</td>
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- Observed prevalence much less than previously estimated
- Laboratory and radiology capacity (staff and infrastructure) insufficient to detect cases early
BREAKING NEWS  30 January

Cambodia: results from 2011 repeat survey (baseline 2002) being released next week
Strengthening surveillance/M&E

- Ultimate goal – direct measurement of cases and deaths from notification and vital registration data

Estimates of disease burden highly reliant on expert opinion

Progressively better estimates based more and more on direct measurements from surveillance data that meet standards and benchmarks (S&B) (already major progress on mortality)

if S&B not met, better quantification of "surveillance gap" e.g. via inventory studies

improved estimates

Recommendations for how to strengthen surveillance to move closer to the goal
Strengthening surveillance

**DATA QUALITY**
- Completeness
- No duplications, no misclassifications
- Internal and external consistency

**TRENDS**
Do surveillance data reflect trends in TB incidence and mortality?
- Analyse time-changes in notifications and recorded deaths alongside changes in case-finding, case definitions, HIV prevalence and other determinants of changes in TB incidence and TB mortality

**ARE ALL TB CASES AND DEATHS CAPTURED IN SURVEILLANCE DATA?**
- "Onion" model
- Inventory studies
- Capture re-capture studies
- Prevalence surveys
- Innovative operational research

**IMPROVE surveillance system**

**EVALUATE trends and impact of TB control**

**UPDATE estimates of TB incidence and mortality**
If appropriate, CERTIFY TB surveillance data as direct measure of TB incidence and mortality

TB notifications \(\approx\) TB incidence
TB deaths in VR system \(\approx\) TB mortality
Major progress in measuring and estimating disease burden

96 country consultations in 2 years
17 African countries plus India and China in past year
Direct measurements of mortality
national vital registration (90 countries) + mortality surveys (India)

91 countries, 46% estimated global TB deaths,
Up from 89 countries with 8% global TB deaths in 2010
China and India for the first time in 2011
Surveillance: 4 priorities for 2011

1. Electronic recording and reporting

2. Guide on inventory studies to measure under-reporting

3. Definition of standards/benchmarks

4. "Institutionalize" use of S&B + related efforts to strengthen surveillance via GF grants
Review/update of methods

- 18-month review by subgroup, mid 2008–2009
- Updated methods endorsed by full Task Force in March 2010 and applied in WHO global reports
- Global Burden of Disease study?
TB cases and deaths, 1990–2010
absolute numbers

**Incidence**

- Peak at 9.0 in 2005
- 8.8 in 2010

- 1.0–1.2 million (12–14%) TB cases among people living with HIV in 2010

**Mortality**

- HIV-negative mortality

- Peak at 1.8 in 2003
- 1.4 in 2010
Incidence, prevalence and mortality rates: **global estimates**

- **Incidence**: Peak in 2002, falling 1.3% per year since 1990.
- **Prevalence**: 40% decline since 1990.
- **Mortality**: 40% decline since 1990.
Next steps and priorities in 2012/13
Task Force meeting May 9-10

1. Prevalence surveys – maintain momentum 2012/13
   - Finalize/disseminate/publish results from China, Myanmar, Ethiopia, Cambodia, Laos, Pakistan
   - High-quality surveys in Tanzania, Gambia, Rwanda, Nigeria, Thailand, Ghana, S. Africa, Malawi, Uganda, Kenya, Indonesia
   - Paper summarizing results + lessons learned, recent surveys

2. Strengthening surveillance/M&E – gaining momentum
   - Finalize standards and benchmarks (including mainstreaming surveillance of drug resistance)
   - Publish and disseminate guides on electronic recording & reporting and inventory studies
   - Institutionalize strengthening surveillance/M&E via widespread and systematic roll-out of standards and benchmarks alongside ERR and inventory studies: NEEDS MORE SUPPORT
Request to Coordinating Board

In general: commitment to strategic and (where possible) financial support

Strengthening surveillance/M&E
- Additional strategic and financial support to bring Task Force work to its full potential

Prevalence surveys
- US$0.3 million/year required for global coordination, including AA collaboration