The WHO Global Task Force on TB Impact Measurement:

An overview of progress to date and current priorities

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Standards and benchmarks for TB surveillance
Meeting of TB surveillance expert group
Geneva, 28–29 September 2011
Overview

- Task Force mandate and strategic areas of work
- Progress to date
- Current priorities
Mandate and strategic areas of work
Task Force mandate (2006**–2015)

- 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

**Established in 2006 with increasing scrutiny and profile of estimates of TB disease burden and assessment of progress towards 2015 targets, alongside strong interest and willingness to contribute among multiple technical and financial partners and countries**
2015 targets for global TB control

- Halt and reverse incidence (MDG 6, Target 6.c)

- Halve prevalence and mortality rates compared with baseline of 1990
Incidence, prevalence and mortality: global estimates

**Incidence**
- 1990: 140
- 2009: 100
- 2015: 60
- Rate per 100,000 population

**Mortality**
- 1990: 35
- 2009: 25
- 2015: 15
- Target

**Prevalence**
- 1990: 300
- 2009: 200
- 2015: 100
- Target

Peak in 2004

Shaded area = uncertainty band
The Task Force's 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

**Defined December 2007, at second meeting of full Task Force; three TF subgroups also formed**
Progress to date and current priorities
General – across 3 areas of work

- Policy paper published 2009
- Many countries and partners engaged at international and national level
- WHO/Global Fund joint "TB impact measurement" team est. 2009
- Further strengthening of collaboration with US Centers for Disease Control and Prevention (CDC) in 2011
- Funding from USAID, Japan, Global Fund, DFID, Dutch government, Stop TB Partnership
Review/update of methods

- 18-month review by subgroup, mid 2008–end 2009

- Updated methods developed and agreed by subgroup, endorsed by full Task Force in March 2010
  - Updated parameter estimates based on literature reviews
  - Simplifications where feasible
  - Incorporation of uncertainty in all estimates
  - Much fuller use of mortality data from vital registration systems

- Updated methods applied in
  - Short update to 2009 WHO global TB control report (December 2009)
  - 2010 WHO report on global TB control
  - TB component of Global Burden of Disease study
Prevalence surveys

Countries where TB prevalence surveys are recommended**

**At second meeting of Task Force, Dec 2007

12/21 global focus countries in Africa

- Red: 21 global focus countries
- Blue: 36 additional countries that met basic criteria

Major collaborative effort
January 2010–February 2011

50 authors

15 agencies/
universities/research institutes and NTPs

Out in print May 2011
Intensive efforts at global and national level to design, finance, implement, analyse, report since early 2008

Global focus countries (GFC) selected by Task Force

- Asia - GFC
- Africa - GFC
- Other GFC
BREAKING NEWS 28 September

Ethiopia: provisional results available from national TB prevalence survey
(first Sub-Saharan Africa TB disease prevalence survey in 50 years)
Disease prevalence surveys: current priorities

1. Start of surveys in global focus countries, with esp. emphasis on Africa
   - Nigeria, Rwanda, Ghana, Tanzania
   - Thailand

2. Support to late-stage preparations
   - Kenya, South Africa, Malawi, Uganda (surveys due to start 2012)

3. Analysis + dissemination of results, lessons learned
   - Myanmar, China, Ethiopia (2011)
   - Cambodia, Pakistan (early 2012)

4. Asia-Africa and Africa-Africa collaboration
   - Assistance by Asian survey coordinators to Africa
   - Assistance from Ethiopia to other African countries
Strengthening surveillance

- 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 ≈ TB incidence
TB deaths in VR system ≈ TB mortality
TF framework applied in 96 countries since April 2009
to update estimates of disease burden
to develop plans for strengthened surveillance

17 African countries plus India and China in the past year
Surveillance: 4 priorities for 2011

1. Electronic recording and reporting

2. Guide on Inventory or TB CAPTURE studies

3. Definition of standards/benchmarks

4. "Institutionalize" use of S&B + related efforts to strengthen surveillance via GF grants
For further details

www.who.int/tb/advisory_bodies/impact_measurement_taskforce

2010 WHO global TB control report, pp 32-40 and Annex 1
