

# WHO Global Task Force on TB Impact Measurement 2024 Meeting, 25–27 September

Estimates of TB incidence and mortality for SDG and End TB Strategy 2025 milestones and 2030 targets assessment: data sources, analytical methods, process

Mövenpick Hotel, Geneva, Switzerland

#### **Background**

A core function of the World Health Organization (WHO) is monitoring and reporting on the health situation and health trends. For tuberculosis (TB), this work is led by WHO's Global TB Programme (GTB).

Each year, GTB implements an annual round of data collection from 215 countries and areas; the main findings and messages, as well as detailed data and disease burden estimates for all countries and areas, are published in WHO's annual Global TB Report. The estimates are used to assess progress towards milestones and targets for reductions in TB disease burden to which all Member States of WHO and the United Nations (UN) have committed through their adoption of the WHO End TB Strategy and UN Sustainable Development Goals (SDGs). The End TB Strategy milestones and targets are shown in Table 1. The SDG framework includes a target to end the TB epidemic by 2030, with TB incidence per 100 000 population per year defined as the indicator for assessment of progress.

Table 1. The WHO End TB Strategy milestones and targets

| Indicator                                   | Milestones |      | Targets |      |
|---|------------|------|---------|------|
|   | 2020       | 2025 | 2030    | 2035 |
| Reduction in annual number of TB deaths     | 35%        | 75%  | 90%     | 95%  |
| (compared with baseline of 2015)            |            |      |         |      |
| Reduction in TB incidence rate              | 20%        | 50%  | 80%     | 90%  |
| (compared with baseline of 2015)            |            |      |         |      |
| Percentage of TB-affected households facing | 0%         | 0%   | 0%      | 0%   |
| catastrophic costs due to TB disease        |            |      |         |      |

Since 2006, estimates of TB disease burden published in WHO global TB reports have been produced using data sources and analytical methods that are periodically reviewed by the WHO Global Task Force on TB Impact Measurement (hereafter, the Task Force). The initial purpose of the Task Force was to ensure a robust, rigorous and consensus-based assessment of whether 2015 targets for reductions in TB disease burden set in the UN Millennium Development Goals (MDGs, 2000–2015) and WHO Stop TB Strategy (2006–2015) were achieved at global, regional and country levels. In the period 2016–2030, its purpose is to ensure robust, rigorous and consensus-based assessment of progress towards the milestones and targets for reductions in TB disease burden set in the WHO End TB Strategy and UN SDGs and, ultimately, assessment of whether or not these are achieved. <sup>2</sup>

To fulfil this purpose, the Task Force currently has four major strategic areas of work. These are:

- Strengthening surveillance. This includes strengthening of national disease notification systems, for direct measurement of TB incidence; and strengthening of national vital registration (VR) systems that include coding of causes of death based on international standards, for direct measurement of the number of deaths caused by TB.
- Priority studies to periodically measure TB disease burden. Examples include national TB
  prevalence surveys, national surveys of costs faced by TB patients and their households, and
  mortality surveys.
- Periodic review of methods used by WHO to produce estimates of the burden of TB disease.
- Analysis and use of TB surveillance and survey data.

<sup>&</sup>lt;sup>1</sup> The Task Force brings together global experts in TB epidemiology, statistics and modelling, representatives from national TB programmes and their national partners (with an emphasis on high TB burden countries), and representatives from major technical and financial agencies working on TB.

<sup>&</sup>lt;sup>2</sup> The Task Force also aims to guide, promote and support analysis and use of TB surveillance and survey data for policy, planning and programmatic action.

The first two strategic areas of work focus on direct measurement of TB disease burden (epidemiological and, in the case of cost surveys, economic). The underlying principle for the Task Force's work since 2006 has been that estimates of the level of and trends in disease burden should be based on direct measurements from routine national surveillance systems and surveys as much as possible. The ultimate goal is that in all countries, TB incidence and mortality can be reliably tracked using surveillance data from national disease notification and VR systems.

The first comprehensive reviews of methods used by WHO to produce estimates of TB disease burden under the umbrella of the Task Force were completed in 2006 (at the first Task Force meeting) and in 2008–2009. The methods used to produce WHO's assessment of whether the 2015 targets (for incidence, prevalence and mortality) were achieved (published in the 2015 WHO Global TB Report) followed a thorough review at a Task Force meeting held in March 2015. During the period of the End TB Strategy, methods used to produce estimates of TB incidence and mortality have been discussed at Task Force meetings held in 2016, 2018 and 2022. The meeting in 2022 focused on methods for estimating TB incidence and mortality during and in the aftermath of the COVID-19 pandemic.

The 2030 targets of the End TB Strategy and SDGs are only six years away, and an assessment of the status of progress with respect to the 2025 milestones of the End TB Strategy will be required in 2026. In this context, and post-pandemic, a thorough review of the methods to be used by WHO to produce estimates of TB incidence and mortality for the periods 2015–2025 and 2015–2030 is needed.<sup>3</sup>

The September 2024 meeting of the Task Force is designed for this purpose.

The meeting is based on three background documents: one on TB incidence estimates, one on TB mortality estimates and one that considers the specific role of national TB prevalence surveys in informing TB incidence estimates. Working versions (and associated questions) will be circulated for review in advance; it is important that meeting participants are able to review all documents before the meeting. The meeting itself will consist of presentations, group work and plenary discussions/summaries.

#### **Objectives**

- To discuss existing as well as new options for methods\* that could be used by WHO to produce estimates of TB incidence required for the End TB Strategy 2025 milestone and the SDG/End TB Strategy 2030 target assessment (i.e., 2015–2025 and 2015–2030).
- 2. To discuss existing as well as new/updated options for methods\* that could be used by WHO to produce estimates of TB mortality required for the End TB Strategy 2025 milestone and 2030 target assessment (i.e., 2015–2025 and 2015–2030).

\*covering data sources, analytical methods and process

### **Expected Outcomes**

- 1. For TB incidence estimates, broad agreement on:
  - Which existing methods remain relevant;
  - Which new methods are suitable for use as currently described;
  - Which new methods could be suitable for use pending further work, and what that work should entail.
- 2. For TB mortality estimates, broad agreement on:
- Whether WHO/GTB should expand efforts to compile more recent VR data;
- Whether less restrictive criteria for use of VR data, or other options for countries without VR data of medium-high quality, are worth exploring;
- Whether it is a priority to update parameter values for case fatality rates (CFRs), used for countries without VR data of medium-high quality, through new literature reviews;
- Whether mortality hazards used in dynamic models (for 2020–2023) should be updated.
- 3. For both TB incidence and mortality estimates:
- Broad agreement on the process/next steps to finalize and implement methods to be used.

<sup>&</sup>lt;sup>3</sup> For assessment of the status of progress towards the target that no TB-affected households face catastrophic costs as a result of TB disease, national facility-based surveys are recommended. In 2023, results from national surveys were used to produce model-based estimates for other low and middle-income countries. WHO guidance on national surveys of costs faced by TB-affected households is being updated in 2024, but updates are relatively light.

### **FINAL AGENDA**

## DAY 1: Wednesday, 25 September 2024

| Time   | Торіс  | Speaker   |  |  |  |  |
|--|--|---|--|--|--|--|
| 09:00 - 09:30  | Arrival, registration, coffee  |   |  |  |  |  |
| 09:30 – 10:00  | Welcome and introduction of participants  Declaration of conflict of interest  | Chair<br>All  |  |  |  |  |
| 10:00 – 10:30  | The WHO Global Task Force on TB Impact Measurement  Introduction and overview  Objectives & expected outcomes of this meeting  | Katherine Floyd   |  |  |  |  |
| 10:30 – 11:30  | Priority studies to periodically measure TB disease burden: provisional results from the 3 <sup>rd</sup> national TB prevalence survey in Cambodia and the 2 <sup>nd</sup> national TB inventory study in Indonesia Introductory remarks followed by two presentations           | Nim Arinaminpathy  Members of Cambodia survey & Indonesia study teams |  |  |  |  |
|  | 11:30 – 11:45 Coffee break   |   |  |  |  |  |
| Objective 1: Estimates of TB incidence required for the End TB Strategy 2025 milestone and SDG/End TB Strategy 2030 targets assessment: existing & new options |  |   |  |  |  |  |
| 11:45 – 13:00  | Presentation with interactive Q&A (focused on questions for clarification)  TB incidence estimates for SDG and End TB Strategy 2025 milestone and 2030 targets assessment: existing & new options for methods that could be used (Background document 1 & Background document 3) | Nim Arinaminpathy<br>Mathieu Bastard                                  |  |  |  |  |
|  | 13:00 – 14:00 Lunch  |   |  |  |  |  |
| 14:00 – 14:15  | Explanation of group work on TB incidence estimates (questions in separate document circulated in advance)   | Katherine Floyd   |  |  |  |  |
| 14:15 – 15:30  | Group work on TB incidence estimates (Part A, Questions 1&2, followed by feedback in plenary)  | All in groups   |  |  |  |  |
| 15:30 – 15:50 Coffee break   |  |   |  |  |  |  |
| 15:50 – 17:30  | Continuation of group work on TB incidence estimates (Part B, Questions 1&2)   | All in groups   |  |  |  |  |
| 17:25 – 17:30  | Wrap up of Day 1   | Chair   |  |  |  |  |
| -  |  |   |  |  |  |  |

# DAY 2: Thursday, 26 September 2024

| Time   | Торіс  | Speaker                       |  |  |  |  |
|--|--|-------------------------------|--|--|--|--|
| Objective 1: Estimates of TB incidence required for the End TB Strategy 2025 milestone and SDG/End TB Strategy 2030 targets assessment: existing & new options |  |                               |  |  |  |  |
| 09:00 – 10.30  | Continuation of group work on TB incidence estimates (Part B, Questions 3&4)   | All                           |  |  |  |  |
| 09:30 – 11:00  | Group feedback (Part B, questions 1&2); further interactive feedback (using Mentimeter) on Part A (Questions 1&2) and Part B (Questions 1&2)   | Rapporteurs<br>All in plenary |  |  |  |  |
|  | 11:00 – 11:20 Coffee break   |                               |  |  |  |  |
| 11:30 – 13:00  | Continuation of group work on TB incidence estimates (Part B, Questions 5,6&7)   | All in groups                 |  |  |  |  |
|  | 13:00 – 14:00 Lunch  |                               |  |  |  |  |
| 14.00 – 14:50  | Group feedback (Part B, questions 3,4&5); further interactive feedback (using Mentimeter) on Part B (Questions 3,4&5)  | Rapporteurs<br>All in plenary |  |  |  |  |
| Objective 2: Estimates of TB mortality required for the End TB Strategy 2025 milestone and 2030 target assessment: existing & new/updated options              |  |                               |  |  |  |  |
| 14:50 – 15:10  | Presentation with interactive Q&A (focused on questions for clarification)  TB mortality estimates for the End TB Strategy 2025 milestone and 2030 target assessment:  Existing and new/updated options that could be used | Mathieu Bastard               |  |  |  |  |
|  | (Background document 2)  |                               |  |  |  |  |
| 15.10 – 15:45  | Group work on TB mortality estimates   | All in groups                 |  |  |  |  |
|  | 15:45 – 16:00 Coffee break   |                               |  |  |  |  |
| 16:00 – 17:00  | Group work on TB mortality estimates   | All in groups                 |  |  |  |  |
| Objective 1: Estimates of TB incidence required for the End TB Strategy 2025 milestone and SDG/End TB Strategy 2030 targets assessment: existing & new options |  |                               |  |  |  |  |
| 17:00 – 17:25  | Feedback from group work on TB incidence estimates (Questions 6&7) followed by further interactive feedback (using Mentimeter)   | Rapporteurs<br>All in plenary |  |  |  |  |
| 17.25 – 17:30  | Wrap up of Day 2   | Chair                         |  |  |  |  |

### DAY 3 (morning only): Friday, 27 September 2024

| Time                       | Торіс   | Speaker  |  |  |
|----------------------------|---|--|--|--|
| 09:00 - 09:40              | Group feedback on TB mortality estimates, followed by interactive feedback (using Mentimeter) | Rapporteurs<br>All in plenary                        |  |  |
| 09:40 - 09:45              | Group feedback on TB incidence estimates (Part C, Q1)   | Rapporteurs  |  |  |
| 09:45 – 10:45              | Updates from meeting participants on other related topics                                     | Finn McQuaid<br>Eveline Klinkenberg<br>Richard White |  |  |
| 10:45 – 11:15 Coffee break |   |  |  |  |
| 11:15 – 11:45              | Additional ideas to share that are directly related to the meeting                            |  |  |  |
| 11:45 – 12:15              | 1:45 – 12:15 Wrap up of meeting, closing remarks  |  |  |  |
| 12:30 – 14:00 Lunch        |   |  |  |  |

<sup>\*</sup> Please inform the WHO secretariat in advance if you would like about 10 minutes to provide a brief update on a topic closely related to this meeting.