SDG indicator metadata

(Harmonized metadata template - format version 1.1)

0. Indicator information (SDG_INDICATOR_INFO)

0.a. Goal (SDG_GOAL)

Goal 3: Ensure healthy lives and promote well-being for all at all ages

0.b. Target (SDG_TARGET)

Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases

0.c. Indicator (SDG_INDICATOR)

Indicator 3.3.2: Tuberculosis incidence per 100,000 population

0.d. Series (SDG_SERIES_DESCR)

SH_TBS_INCD - Tuberculosis incidence [3.3.2]

0.e. Metadata update (META_LAST_UPDATE)

2025-03-28

0.f. Related indicators (SDG_RELATED_INDICATORS)

Indicators associated with tuberculosis incidence: numbers: 1.1.1, 1.3.1, 2.1.1, 3.3.1, 3.4.1, 3.5.2, 3.a.1, 3.8.1, 3.8.2, 7.1.2, 8.1.1, 10.1.1, 11.1.1

0.g. International organisations(s) responsible for global monitoring (SDG_CUSTODIAN_AGENCIES)

World Health Organization (WHO)

1. Data reporter (CONTACT)

1.a. Organisation (CONTACT_ORGANISATION)

World Health Organization (WHO)

2. Definition, concepts, and classifications (IND_DEF_CON_CLASS)

2.a. Definition and concepts (STAT_CONC_DEF)

Definition:
Tuberculosis (TB) incidence is defined as the estimated number of new and relapse TB cases (all forms of TB, including cases in people living with HIV) arising in a given year. It is usually expressed as a rate per 100 000 population.

Concepts:
Direct measurement requires high-quality surveillance systems in which underreporting is negligible, and strong health systems so that under-diagnosis is also negligible; otherwise, indirect estimates are produced, using either a) notification data combined with estimates of levels of underreporting and under-diagnosis, b) inventory studies combined with capture-recapture modelling, c) population-based surveys of the prevalence of TB disease or d) dynamic models fitted to monthly/quarterly notification data.

Dynamic models are only used for selected countries in which major drops in TB case notifications from 2020 onwards, compared with pre-2020 trends, suggest major reductions in access to TB diagnosis and treatment during the COVID-19 pandemic.

2.b. Unit of measure (UNIT_MEASURE)

Number of incident cases per year per 100,000 population.

2.c. Classifications (CLASS_SYSTEM)

Consolidated guidance on tuberculosis data generation and use: module 1: tuberculosis surveillance. Geneva: World Health Organization; 2024 (https://www.who.int/publications/i/item/9789240075290).

3. Data source type and data collection method (SRC_TYPE_COLL_METHOD)

3.a. Data sources (SOURCE_TYPE)

Details about data sources and methods are available in annex 2 and the technical appendix on methods used by WHO to estimate the global burden of tuberculosis disease published alongside the most recent WHO Global Tuberculosis Report at https://www.who.int/teams/global-tuberculosis-programme/data

3.b. Data collection method (COLL_METHOD)

National Tuberculosis (TB) Programmes report their annual TB data to WHO every year between April and June using a standardized web-based data reporting system maintained at WHO. The system includes real-time checks for data consistency. Estimates of TB burden are prepared in June-July and shared with countries for review in July-August; revisions are made based on feedback received. In selected countries with new survey data, estimates are updated separately during the year. The final set of estimates is reviewed in WHO before publication in October, for compliance with specific international standards and harmonization of breakdowns for age and sex groups.

3.c. Data collection calendar (FREQ_COLL)

April-June each year

3.d. Data release calendar (REL_CAL_POLICY)

October each year

3.e. Data providers (DATA_SOURCE)

National TB Programmes, Ministries of Health

3.f. Data compilers (COMPILING_ORG)

World Health Organization (WHO)

3.g. Institutional mandate (INST_MANDATE)

Several World Health Organization resolutions endorsed by Member States at different World Health

Assemblies have given the World Health Organization responsibility for monitoring the burden of TB globally and reporting on the response:

Global strategy and targets for tuberculosis prevention, care and control after 2015, World Health Organization, 67th World Health Assembly, Resolutions and decisions, Resolution WHA 67.11, Geneva, Switzerland, 2014.
https://apps.who.int/gb/ebwha/pdf_files/WHA67-REC1/A67_2014_REC1-en.pdf#page=25

Prevention and control of multidrug-resistant tuberculosis and extensively drug-resistant tuberculosis, World Health Organization, 62nd World Health Assembly, Resolutions and decisions, Resolution WHA 62.15, Geneva, Switzerland, 2009.
https://apps.who.int/gb/ebwha/pdf_files/WHA62-REC1/WHA62_REC1-en-P2.pdf#page=25

Tuberculosis control: progress and long-term planning
World Health Organization. 60th World Health Assembly. Resolutions and decisions.
Resolution WHA 60.19. Geneva, Switzerland: WHO; 2007.
https://apps.who.int/gb/ebwha/pdf_files/WHASSA_WHA60-Rec1/E/WHASS1_WHA60REC1-en.pdf#page=67

Sustainable financing for tuberculosis prevention and control
World Health Organization. 58th World Health Assembly. Resolutions and decisions.
Resolution WHA 58.14. Geneva, Switzerland: WHO; 2005. https://apps.who.int/gb/ebwha/pdf_files/WHA58-REC1/english/A58_2005_REC1-en.pdf#page=96

Stop Tuberculosis Initiative
World Health Organization. 53rd World Health Assembly. Resolutions and decisions.
Resolution WHA 53.1. Geneva, Switzerland: WHO; 2000. https://apps.who.int/gb/ebwha/pdf_files/WHA53-REC1/WHA53-2000-REC1-eng.pdf#page=18

Tuberculosis control programme
World Health Organization. 44th World Health Assembly. Resolutions and decisions.
Resolution WHA44.8. Geneva, Switzerland: WHO, 1991.

Two United Nations high-level meetings on TB also requested WHO to continue for monitoring the burden of TB globally and reporting on the response:

Resolution 78/5: Political declaration of the high-level meeting of the General Assembly on the fight against tuberculosis. New York: United Nations; 2023 (https://undocs.org/A/RES/78/5).

Resolution 73/3: Political declaration of the high-level meeting of the General Assembly on the fight against tuberculosis. New York: United Nations; 2018 (https://undocs.org/A/RES/73/3).

4. Other methodological considerations (OTHER_METHOD)

4.a. Rationale (RATIONALE)

Following two years of consultations, a post-2015 global tuberculosis strategy was endorsed by the World Health Assembly in May 2014. Known as the End TB Strategy, it covers the period 2016-2035. The overall goal is to “End the global tuberculosis epidemic”, and correspondingly ambitious targets for reductions in

tuberculosis deaths and cases are set for 2030 (80% reduction in incidence rate compared with the level of 2015) and 2035 (90% reduction in incidence rate), in the context of the SDGs.

The tuberculosis incidence rate was selected as an indicator for measuring reductions in TB disease burden. Although this indicator was estimated with considerable uncertainty in most countries in 2014, notifications of cases to national authorities provide a good proxy if there is limited under-reporting of detected cases and limited under- or over-diagnosis of cases.

4.b. Comment and limitations (REC_USE_LIM)

TB incidence has been used for over a century as a main indicator of TB burden, along with TB mortality. The indicator allows comparisons over time and between countries. Improvement in the quality of TB surveillance data result in reduced uncertainty about indicator values.

4.c. Method of computation (DATA_COMP)

Estimates of TB incidence are produced through a consultative and analytical process led by WHO and are published annually. These estimates are derived from annual case notifications, assessments of the quality and coverage of TB notification data, national surveys of the prevalence of TB disease, national inventory studies and information from death (vital) registration systems.

For the period 2000-2019, estimates of incidence for each country were derived using one or more of the following approaches, depending on available data: (i) incidence = case notifications/estimated proportion of cases notified; (ii) capture-recapture modelling, (iii) estimated duration of untreated TB, applied to prevalence estimates where available.

For 2020 and subsequent years, these methods were retained for most countries. However, for countries with large absolute reductions in the reported number of people newly diagnosed with TB from 2020 onwards, relative to pre-2020 trends, which suggested major disruptions to access to TB diagnosis and treatment during the COVID-19 pandemic, dynamic models were used in replacement of the methods used for 2000-2019.

Uncertainty bounds are provided in addition to best estimates.

Details are provided in the technical appendix on methods used by WHO to estimate the global burden of tuberculosis disease published alongside the most recent WHO global tuberculosis report at https://www.who.int/teams/global-tuberculosis- programme/data.

4.d. Validation (DATA_VALIDATION)

Estimates of TB burden are prepared in June-July and shared with countries for review. In selected countries with new survey data, estimates are updated separately during the year. All estimates are communicated in July-August and revisions are made based on feedback. The final set of estimates is reviewed in WHO before publication in October, for compliance with specific international standards and harmonization of breakdowns for age and sex groups.

4.e. Adjustments (ADJUSTMENT)

The final set of estimates is reviewed in WHO before publication in October, for compliance with specific international standards and harmonization of breakdowns for age and sex groups.

4.f. Treatment of missing values (i) at country level and (ii) at regional level (IMPUTATION)

- **At country level**

Details are provided in the technical appendix of each WHO Global Tuberculosis Report at https://www.who.int/teams/global-tuberculosis-programme/data

- **At regional and global levels**

Details are provided in the technical appendix of each WHO Global Tuberculosis Report at https://www.who.int/teams/global-tuberculosis-programme/data

4.g. Regional aggregations (REG_AGG)

Country estimates of case counts are aggregated. Uncertainty is propagated assuming independence of country estimates.

4.h. Methods and guidance available to countries for the compilation of the data at the national level (DOC_METHOD)

Consolidated guidance on tuberculosis data generation and use: module 1: tuberculosis surveillance. Geneva: World Health Organization; 2024 (https://www.who.int/publications/i/item/9789240075290).

4.i. Quality management (QUALITY_MGMNT)

All health statistics published by WHO undergo a systematic internal review process from the Data Division, including TB burden statistics. External review of specific statistics is conducted in various ways, including through country consultations and reviews by technical review bodies such as the WHO Global Task Force on TB Impact Measurement (https://www.who.int/groups/global-task-force-on-tb-impact-measurement/).

4.j Quality assurance (QUALITY_ASSURE)

The underlying TB data reported by WHO member states is carefully checked for completeness and internal consistency. Additional data sources are used in the process of disease burden estimation, including survey results, according to methods published in WHO documents mentioned in previous sections and cited in section 7.

4.k Quality assessment (QUALITY_ASSMNT)

TB surveillance data are assessed systematically through ‘epidemiological reviews’, which provide data quality scores used to update plans for strengthening TB surveillance and are used to inform estimates for the burden of TB. In addition, the data are reviewed internally for consistency. Data and estimates are published in the form of country profiles, which are published following their review by countries, as mentioned in previous sections and cited in section 7. Results are published in detail in publicly available annual global TB reports.

5. Data availability and disaggregation (COVERAGE)

Data availability:

All countries

Time series:

2000 onwards

Disaggregation:

The indicator is disaggregated by country, sex and age group and five risk factors.

6. Comparability / deviation from international standards (COMPARABILITY)

Sources of discrepancies:

Population denominators may differ between national sources and United Nations Population Division (UNPD). WHO uses UNPD population estimates.

7. References and Documentation (OTHER_DOC)

URL:

https://www.who.int/teams/global-tuberculosis-programme/data

References:

The latest WHO Global Tuberculosis Report: https://www.who.int/teams/global-tuberculosis-programme/data).

Consolidated guidance on tuberculosis data generation and use: module 1: tuberculosis surveillance. Geneva: World Health Organization; 2024 (https://www.who.int/publications/i/item/9789240075290).

World Health Assembly governing body documentation: official records. Geneva: World Health Organization (https://apps.who.int/gb/or/).