Access to the WHO global TB database
A.1 Database contents

The 2016 global TB report is based on data collected annually from countries and territories, including 194 Member States. These data are stored in the global TB database.

In 2016, data were collected on the following topics: TB case notifications and treatment outcomes, including breakdowns by TB case type, age, sex, HIV status and drug resistance; laboratory diagnostic services; monitoring and evaluation, including surveillance and surveys specifically related to drug-resistant TB; TB preventive therapy; TB infection control; engagement of all public and private care providers in TB control; community engagement; the budgets of national TB control programmes (NTPs); utilization of general health services (hospitalization and outpatient visits) during treatment; and NTP expenditures. A shortened version of the online questionnaire was used for high-income countries (that is, countries with a gross national income per capita of ≥US$ 12,476 in 2015, as defined by the World Bank)\(^1\) and/or low-incidence countries (defined as countries with an incidence rate of <20 cases per 100,000 population or <10 cases in total).

Countries reported data using a dedicated website (https://extranet.who.int/tme), which was opened for reporting in early April 2016. Countries in the European Union submitted notification and treatment outcomes data to the TESSy system managed by the European Centre for Disease Prevention and Control (ECDC). Data from TESSy were uploaded into the global TB database.

Additional data about the provision of isoniazid preventive therapy (IPT) to people living with HIV and antiretroviral therapy (ART) for HIV-positive TB patients were collected by the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the HIV department in WHO. These data were jointly validated by UNAIDS and the WHO’s Global TB Programme and HIV department, and uploaded into the global TB database.

Following review and follow-up with countries, the data used for the main part of this report were those data available on 15 August 2016. The number of countries and territories that had reported data by 15 August 2016 is shown in Table A1.1.

\(\text{:: TABLE A1.1}\)

**Reporting of data in the 2016 round of global TB data collection**

<table>
<thead>
<tr>
<th>WHO REGION OR SET OF COUNTRIES</th>
<th>COUNTRIES AND TERRITORIES</th>
<th>WHO MEMBER STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NUMBER</td>
<td>NUMBER THAT REPORTED DATA</td>
</tr>
<tr>
<td>African Region</td>
<td>47</td>
<td>46</td>
</tr>
<tr>
<td>Region of the Americas</td>
<td>46</td>
<td>41</td>
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<tr>
<td>Eastern Mediterranean Region</td>
<td>22</td>
<td>20</td>
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<tr>
<td>European Region</td>
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<td>48</td>
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<tr>
<td>South-East Asia Region</td>
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<td>11</td>
</tr>
<tr>
<td>Western Pacific Region</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Global</td>
<td>216</td>
<td>202</td>
</tr>
</tbody>
</table>

\(^a\) Countries that did not report by the deadline were mostly low-incidence countries in Western Europe.

A.2 Accessing TB data using the WHO Global TB Programme website

You can find most of the data held in the global TB database by going to www.who.int/tb/data. This web page gives you access to country profiles, comma-separated value (CSV) data files and data visualisations.

A2.1 Country profiles

Profiles can be viewed and downloaded for all 216 countries and territories that report TB data to WHO each year, and not just the 30 high burden countries shown in the printed version of the global TB report. The profiles can be generated on-demand directly from the global TB database and therefore may include updates received after publication of the global TB report.

TB financial profiles can be viewed and downloaded for over 100 countries and territories that report detailed TB financial data to WHO.

A2.2 CSV data files

These files are the primary resource for anyone interested in conducting their own analyses of the records in the global TB database. Data reported by countries, such as time series for case notifications and treatment outcomes and WHO’s estimates of TB disease burden, can be downloaded as comma-separated value (CSV) files covering all years for which data are available. These CSV files can be imported into many spreadsheet, statistical analysis and database packages.

\(^1\) http://data.worldbank.org/about/country-classifications
A data dictionary that defines each of the variables available in the CSV files is also available and can be downloaded. The CSV files are generated on-demand directly from the global TB database, and therefore may include updates received after publication of the global TB report.

## A2.3 Data visualisations

There are several interactive web pages that can be used to view maps, graphs and underlying data on TB case notifications, drug-resistant TB cases, treatment outcomes and WHO estimates of TB incidence and mortality (Figure A1.1).

### FIG. A1.1

Interactive page to view MDR-TB indicators by region or country and year

![Diagnosis, notification and treatment of rifampicin-resistant TB (MDR/RR-TB)](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Notified TB cases</th>
<th>% new TB cases with drug susceptibility testing (DST) results</th>
<th>% previously treated TB cases with DST results</th>
<th>Notified MDR/RR-TB cases</th>
<th>Patients started on MDR-TB treatment</th>
<th>MDR/RR-TB cases in treatment outcome cohort</th>
<th>Estimated MDR-TB among notified pulmonary TB cases (best)</th>
<th>Estimated MDR-TB among notified pulmonary TB cases (low bound)</th>
<th>Estimated MDR-TB among notified pulmonary TB cases (high bound)</th>
</tr>
</thead>
<tbody>
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<td>2006</td>
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<td>1342120</td>
<td>1417744</td>
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<td>1422655</td>
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</tbody>
</table>

Outcomes for MDR-TB treatment are reported two years after the end of the year of enrolment. Patients may not necessarily have been treated using internationally-recommended regimens or norms.

% TB cases with 1st line DST exceeding 100% are shown as 100%; this may happen if TB notification is incomplete especially in systems where reporting of TB and DST are not linked.

Source: [http://www.who.int/gho/](http://www.who.int/gho/)

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### A.3 Accessing TB data using the WHO Global Health Observatory

The WHO Global Health Observatory (GHO) at [www.who.int/gho/](http://www.who.int/gho/) is WHO’s portal, providing access to data and analyses for monitoring the global health situation. It includes a data repository.

Key data from WHO’s global TB database can be viewed, filtered, aggregated and downloaded from within the GHO Data Repository at [http://apps.who.int/gho/data/node.main.1315](http://apps.who.int/gho/data/node.main.1315)

The GHO data table headers include links to variable and indicator definitions. The data can be downloaded in many formats, including as CSV and Excel files (Figure A1.2).

There is also an Application Programme Interface (API) for analysts and programmers to use GHO data directly in their software applications. See [http://apps.who.int/gho/data/node.resources](http://apps.who.int/gho/data/node.resources)
A data table in the GHO Data Repository

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Total number of notified TB cases</th>
<th>TB patients with known HIV status (%)</th>
<th>Tested TB patients HIV-positive (%)</th>
<th>HIV-positive TB patients on CPT (co-trimoxazole preventive therapy) (%)</th>
<th>HIV-positive TB patients on ART (antiretroviral therapy) (%)</th>
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