Data resources in
FP/CAC research and learning

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Today: An “information sharing” webinar

- Review and/or introduction to selected data visualizations tools relevant in FP/CAC research and learning
- Review and/or introduction to selected data sources
- We may not get through all - independent study highly encouraged!
Matching information resource to information need
Center for International Reproductive Health Training (CIRHT)

Overview
Research & Clinical Resources
EBM & Critical Appraisal
Open Access Journals
E-books and Publications
Educational Toolkits

Data Sources
Data Sources - Ethiopia
Data Sources - Rwanda

Mobile Resources
Organizations & Initiatives
Global Burden of Disease (GBD)
Scholarly Communication
Information Resource Training
Learning Videos and Webinars

Multimedia
- The Global Goals
  YouTube channel for the UN Global Goals for Sustainable Development
- Medical Aid Films
  Film collections from reproductive health

Statistical Sources (selected)
- data.unicef.org
  UNICEF Data: Monitoring the Situation of Children and Women
- Demographic and Health Surveys
  The Demographic and Health Surveys (DHS) program has collected, analyzed, and disseminated accurate and representative data on population, health, HIV, and nutrition through more than 260 surveys in over 90 countries.
- EQUIS (Equitable Impact Sensitivity Tool) Dashboard
  "Designed to help decision-makers develop equitable strategies to improve health and nutrition for the most vulnerable children and women."
- Family Planning and Reproductive Health Indicators Database
  From the MEASURE Evaluation project: A comprehensive listing of the most widely used indicators for evaluating family planning and reproductive health programs in developing countries.
- FP2020 Data Hub
- Global Health Data Exchange (GHDx-Data)
  A new catalog of the world’s health and demographic datasets from the Institute of Health Metrics and Evaluation.
- HealthMap: Global Disease Alert Map
  Brings together several data sources on current global state of infectious diseases and their effect on human and animal health. Data is aggregated by disease and displayed by location on global and regional maps.
- Institute of Health Metrics and Evaluation
  The Institute for Health Metrics and Evaluation (IHME) is an independent global health research center at the University of Washington.
- Millennium Development Goals Indicators
  This site presents the official data, definitions, methodologies and sources for more than 60 indicators to measure progress towards the Millennium Development Goals.
- PMA2020 (Performance, Management and Accountability 2020)

Visualizing Global Data
- World Population 2018 Dashboard
  Source: UNFPA
- FP2020 Data Hub
- Track 2020 FP2020
  "The Track20 Project monitors progress towards achieving the goals of the global FP2020 initiative, adding an additional 120 million modern method users between 2012 and 2020 in the world’s 69 poorest countries."
- Data Visualization - Institute for Health Metrics and Evaluation
  Data freely and easily accessible and to provide innovative ways to visualize complex global topics.
- STACcompiler (beta)
  Visualize and explore data in custom tables, column charts, line graphs, maps, and scatterplots on hundreds of demographic and health indicators across more than 70 countries.
- Guttmacher Data
  State, national, and global sexual and reproductive health data.
- Gapminder for world view
  Display various data sets and trends over time.
“Seeing is Believing”: Exploring data visualization sources

“The greatest value of a picture is when it forces us to notice what we never expected to see.”

So many data visualization sources... a few selected

**General:**
- Global Burden of Disease

**Subject-specific:**
- IHME Maternal Health Atlas
- EQUIST
- Track 20 | FP2020
- Guttmacher Institute | Data Center
Global Burden of Disease (GBD) data: An Introduction

http://www.healthdata.org/gbd

“The Global Burden of Disease Study (GBD) is the most comprehensive worldwide observational epidemiological study to date. It describes mortality and morbidity from major diseases, injuries and risk factors to health at global, national and regional levels. Examining trends from 1990 to the present and making comparisons across populations enables understanding of the changing health challenges facing people across the world in the 21st century.”

The Lancet | Global Burden of Disease
https://www.thelancet.com/gbd
Accessing the Global Burden of Disease data

http://www.healthdata.org/gbd
http://www.healthdata.org/data-visualization/GBD-compare
GBD Compare

Publication date:
November 8, 2018

ABOUT THE TOOL

Analyze updated estimates of the world’s health for 359 diseases and injuries and 84 risk factors from 1990 to 2017 in this interactive tool. Use maps and treemaps, arrow diagrams, and many other charts to compare causes and risks within a country, compare countries with regions or the world, and explore patterns and trends by age, sex, and region.
<table>
<thead>
<tr>
<th>Rank</th>
<th>Condition</th>
<th>2000 Rank</th>
<th>2017 Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HIV/AIDS other</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>3</td>
<td>Drug-susceptible TB</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>4</td>
<td>Conflict &amp; terror</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>5</td>
<td>Malaria</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>6</td>
<td>Diarrheal diseases</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>7</td>
<td>Lower respiratory infect</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>8</td>
<td>Maternal hemorrhage</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>9</td>
<td>Maternal sepsis</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>10</td>
<td>Maternal hypertension</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>11</td>
<td>Major depression</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>12</td>
<td>Migraine</td>
<td>2000</td>
<td>2000</td>
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<tr>
<td>14</td>
<td>Low back pain</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>15</td>
<td>Pedestrian road injury</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>16</td>
<td>Dietary iron deficiency</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>17</td>
<td>Anxiety disorders</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>18</td>
<td>Intracerebral hem</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>19</td>
<td>Epilepsy</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>20</td>
<td>Asthma</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>21</td>
<td>Self-harm other means</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>23</td>
<td>Breast cancer</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>24</td>
<td>COPD</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>25</td>
<td>Diabetes type 2</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>26</td>
<td>Age-related hearing loss</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>27</td>
<td>Diabetes type 2</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>28</td>
<td>Injuries</td>
<td>2000</td>
<td>2000</td>
</tr>
</tbody>
</table>

**Communicable, maternal, neonatal, and nutritional diseases**
- Communicable diseases
- Maternal, neonatal, and nutritional diseases

**Non-communicable diseases**
- Cardiovascular diseases
- Respiratory diseases
- Interventions and health services

**Injuries**
- External causes of injury and poisoning
Maternal hemorrhage

Year: 2000
Rank: 1
Rate: 1,101.59 DALYs per 100,000 (625.87 - 1,668.34)

Rwanda: 1-49 years, DALYs per 100,000

2017 rank

1. Maternal hemorrhage
2. Maternal sepsis
3. Maternal hypertension
4. Other maternal disorders
5. Maternal indirect
6. Obstructed labor
7. Maternal abortion miscarriage
8. Maternal HIV
9. Ectopic pregnancy
10. Maternal late

Communicable, maternal, neonatal, and nutritional diseases
Non-communicable diseases
Injuries

1. Maternal hypertension
2. Maternal sepsis
3. Other maternal disorders
4. Maternal indirect
5. Obstructed labor
6. Maternal abortion miscarriage
7. Maternal HIV
8. Maternal hemorrhage
9. Ectopic pregnancy
10. Maternal late
What is the rate of YLLs due to maternal abortion and miscarriage among women ages 15-49 years in Eastern Sub-Saharan countries over time?

Resource to investigate:

GBD Compare
I want to create a visualization of maternal mortality ratio over time comparing countries in South Asia.

Resource to investigate:
Despite the decrease in the number of maternal deaths, the world will fail to meet its 2030 Sustainable Development Goal target. In human terms, this means, at the current rate of progress, over an additional million women will lose their lives. Explore the latest maternal mortality estimates for 2017 as well as trends since 2000. To learn more, click here [1].
3

TRENDS IN MATERNAL MORTALITY

METHODS

What are the Key Drivers of maternal deaths in Ethiopia, Rwanda and Afghanistan? How do they compare?

Resource to investigate:
IHME Maternal Health Atlas
Key Drivers of Maternal Deaths

Changes in a country’s population size, age, and birth rate impact maternal mortality. Where has population growth led to more maternal deaths? What about an increase in birth rates in older mothers? Have pregnancies become safer or more dangerous over time?

In the graphic below, you can compare the biggest factors that increase (positive % change) or reduce (negative % change) deaths of mothers in different countries.
What are the projected trends for modern contraceptive prevalence rate (mCPR) for Ghana in 2020?

How is mCPR calculated?

Resource to investigate:
Track 20 | FP2020
Explore FP2020 Core Indicator estimates for any FP2020 country.

Choose your country >>

Explore Track20

Country Support
Monitoring Annual Progress
Service Statistics
Innovative Tools
Global Analysis

What's new?

October 2018
Attending ICFP? Want to make your own annual family planning estimates? Attend Track20’s Family Planning Estimate Tool (FPET) Training! Register at https://goo.gl/forms/1y8IPX4PZGTKTimm2 by October 29.

July 2017
Check out our first blog post...
Projected Trends in mCPR

Ghana

- mCPR (AW): 22.3
- mCPR (MW): 28.4
- Unmet Need (MW): 33.6
- Demand Satisfied (MW): 54.3
- Additional Users: 525,600

The data above is reported in the annual progress report FAQ20.
Catalyzing Collaboration 2017-18. These values were produced using TRACK20’s IVFET model.

In 2018

1,647,000 women are using a modern method of contraception

As a result of that contraceptive use

- 594,000 unintended pregnancies will be prevented
- 212,000 unsafe abortions will be averted
- 1,100 maternal deaths will be averted

Modern Contraceptive Method Mix

Ghana

- Sterilization (female)
- IUD
- Implants
- Injectable
- Pill
- Condom (male)
- Other Modern Methods
Data Sources and Methodology for FP2020 Core Indicators

Data sources and methodology for estimating values for the FP2020 Core Indicators, for the most recent FP2020 Progress Report: Catalyzing Collaboration 2017-2018 are described below. Instructions on how to calculate Core Indicator estimates for your country, with accompanying Excel tools where applicable, are available under Track20 Resources.

To learn more about the indicators and their definitions, view the FP2020 Core Indicator Table.

Incorporating the newest data to re-estimate trends

Each year, when data for the annual report are prepared, newly released country data (data from surveys, service statistics, new population estimates, etc.) are used in our models to produce new estimates, not just for the current year, but for previous years as well. Continuously incorporating new data allows us to report the best possible estimates at any given point in time. Therefore, Indicators 1-8, which are modeled, are reported for 2012 onwards in each annual FP2020 report, and may have a different value in the current report than in previous reports. For more information, see the Track20 technical brief "Rolling baseline for tracking FP2020 progress".

Data Sources and Methodology, by Indicator

- **Indicator 1:** Number of Additional Users of Modern Methods of Contraception
- **Indicator 2:** Contraceptive prevalence rate, modern methods (mCPR, all women)
- **Indicator 3:** Percentage of women with an unmet need for modern methods of contraception
- **Indicator 4:** Percentage of women whose demand is satisfied with a modern method of contraception
- **Indicator 5:** Number of unintended pregnancies
- **Indicator 6:** Number of unintended pregnancies averted due to modern contraceptive use
- **Indicator 7:** Number of unsafe abortions averted due to modern contraceptive use
- **Indicator 8:** Number of maternal deaths averted due to modern contraceptive use
Indicator 1: Number of Additional Users of Modern Methods of Contraception

Indicator 2: Contraceptive prevalence rate, modern methods (mCPR, all women)

The percentage of women of reproductive age who are using (or whose partner is using) a modern contraceptive method at a particular point in time.

Calculation: mCPR is calculated using Track20's FPET tool, which includes a country's historic and recent DHS, MICS, PMA2020 and other national survey data (mCPR and unmet need). Based on this data, FPET produces estimates for mCPR among married women; these values are then converted to values that apply to all women of reproductive age (WRA). Track20 is in the process of updating FPET so that it produces estimates for all women, so that this conversion will not be necessary in the future.

Conversion from mCPR for married women to mCPR for all women

For countries with a previous DHS or PMA2020 survey, the ratio of mCPR for all and married women from that survey was used to convert the married women mCPR from FPET to a value for all women. In countries with no previous DHS, a regional estimate was used. In some countries, it was assumed that there is no use of modern contraception by unmarried women, and the number of married modern method users was divided by the population of women of reproductive age to produce an mCPR estimate for all women.

Inclusion of routine data in FPET

Countries producing their own estimates had the option of including country-specific service statistics data in FPET. Incorporating recent routine data from health management information systems into FPET allows the model to produce estimates that better reflect the current situation in the country, particularly when the most recent survey data are out of date. Countries with service statistics data (on contraceptive commodities distributed, or number of visits for contraceptives) of reasonable consistency and quality were able to include this data in their FPET run. Married women values were converted to all women values as described above.

Incorporating service statistics data into FPET requires entry of multiple years of data to calibrate the model. In the FPET model, the trend between the service statistics points (and not the absolute values) inform the mCPR after the last cross-sectional survey data point. It is understood that there is inherent bias in service statistics data, so FPET has been calibrated to correct for this bias.

Download the calculator for this indicator at:

Indicator 3. Percentage of women with an unmet need for modern methods of contraception

Indicator 4: Percentage of women whose demand is satisfied with a modern method of contraception
PMA collects a nationally or sub-nationally representative sample of data from households and women in selected sentinel sites, to estimate family planning and other health indicators on an annual basis in nine pledging FP2020 countries. The PMA surveys involve interviewing a sample of females aged 15 to 49 years and a probability sample of health facilities, pharmacies, and retail outlets that offer family planning services to the selected communities. The female respondents are asked questions about their background, their birth history and fertility preferences, their use of family planning methods, and other information that is helpful to policymakers and program administrators in health and family planning improvement.

The survey sample in each country is based on a multi-stage cluster design, typically using urban-rural and major regions as the strata. A nationally representative number of geographical clusters ("enumeration areas") is sampled in each program country. In each enumeration area, households are listed and mapped. Households are systematically sampled for inclusion in the survey round, using random selection. Embedded in each household survey is the female respondent survey, with a series of questions for all women of reproductive age (15-49) living at each household. Respondents for the service delivery point survey are management staff reporting on behalf of the facility.
I would like to map data in Sub-Saharan Africa according to unmet need for contraception by education and marital status.

What is the estimated abortion rate in Eastern Sub-Saharan Africa?

Resource to investigate:
Guttmacher Institute | Data Center
Unmet need for contraception

% of married women aged 15-49 with unmet need among those with <7 years schooling

Notes

a. Defined as married or sexually active, fecund woman who does not want a child soon or at all and is not using contraception.


Sources

## DATA CENTER
Build, download and share custom tables, graphs and maps utilizing data on key sexual and reproductive health indicators from the Guttmacher Institute and other trusted sources.

### TABLE
Select 1 or more regions and 1 or more topics. Click the TABLE button below.

#### Regions (1)
- Africa
- Eastern Africa
- Middle Africa
- Northern Africa
- Southern Africa
- Western Africa

#### Topics (1)
- Abortion
  - Abortion incidence
    - Abortion rate
    - Abortion rate by marital status
    - Number of abortions
    - Percentage of abortions by marital status
  - Abortion outcomes
    - Percentage of pregnancies ending in abortion

*Selecting fewer topics at a time results in better performance.*
### No. of abortions per 1,000 women aged 15–44, 2010-2014

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of abortions</th>
<th>90% Uncertainty interval</th>
<th>% of all pregnancies ending in abortion, 2010-2014</th>
<th>90% Uncertainty interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Africa</td>
<td>34</td>
<td>(31-41)</td>
<td>14</td>
<td>(13-16)</td>
</tr>
</tbody>
</table>

#### Sources
- Sources: [1]
- Sources: [1]
- Sources: [1]
- Sources: [1]

### Notes
- a. Average rate per year, 2010-2014
- b. The uncertainty interval provides information on the precision of the estimate; there is a 90% chance that it contains the true value.
- c. Average percentage per year, 2010-2014

#### Sources
I want to visualize cause of sociocultural acceptability of contraception use by Ethiopian regions.

What is the cause of maternal mortality by Rwandan provinces?

Resource to investigate:

EQUIST | UNICEF (EQUITABLE IMPACT SENSITIVE TOOL)
EQUITABLE IMPACT SENSITIVE TOOL (EQUIST)

EQUIST is a web-based tool utilised for strategic planning and prioritization of maternal, newborn and child health interventions as well as allocation of related resources in low and middle-income countries. The explicit goal of EQUIST is to reduce health disparities between the most marginalized mothers and young children, and the better-off. EQUIST helps policy makers select strategies that balance the principles of equity, effectiveness and efficiency by leading them through a logical process to identify the most rational and cost-effective solutions for their context.

EQUIST is principally a tool that uses data and situation analysis to identify priorities, in terms of populations, diseases, interventions and strategies. The priorities selected may reinforce the overall system and have positive effects on services other than those benefiting MNCH. The principles applied by the tool can be used for any sector and at any level of the health system, subject to data availability, and can be adjusted to focus on specific aspects of the health system or the health system as a whole.

EQUIST is based on a simple seven-step theory of change, which also underpins UNICEF’s general approach to health system strengthening. This theory of change assumes that investments in, and implementation of, equity-focused strategies that remove quantifiable health system bottlenecks will lead to improvements in the coverage of high-impact health interventions and improved health outcomes for target populations.

EQUIST uses data to help users visualize and select priority populations and health and nutrition conditions; to understand which interventions may resolve these conditions, and which bottlenecks in the health system are presently constraining their delivery. It then helps the user address the causes of these bottlenecks, especially for the most disadvantaged, and estimates the impacts and cost-effectiveness of the strategies. The process can then be repeated to compare alternative strategy options.

Sustainable Development Goals covered by this tool

From:
“Just the facts”: Exploring data sources
So many data sources...a few selected

Note: We still need general health data sources in context for FP/CAC research and learning

General:
- WHO Global Health Observatory
- World Bank Open Data

Subject-specific:
- Global Abortions Policies Database
- Family Planning Indicator Data | DHS Program
What is the TB profile for South Africa?

General resource to investigate:

WHO Global Health Observatory data
Global Health Observatory (GHO) data

Global Strategy for Women’s, Children’s and Adolescents’ Health (2016-2030): Data portal

The Every Woman Every Child Global Strategy indicator and monitoring framework includes 60 indicators from health and other sectors. 34 indicators are from the Sustainable Development Goals (SDGs) and 26 from related global monitoring initiatives. From these, 16 key indicators are highlighted to provide a snapshot of progress.

The Global Strategy portal provides open access to the latest available data and estimates for the 60 indicators across 164 countries. This involves collaboration across WHO departments, H6 agencies (UNAIDS, UNFPA, UNICEF, UN Women, WHO and the World Bank), other UN organizations - including the UN Statistics Division and UNESCO, and global monitoring partnerships, including the Countdown to 2030 and academic institutions.

- Access the portal

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**Child care**

- **Approx. 60%** of children with suspected pneumonia are taken to an appropriate health provider

**Health worker density**

- **Over 30%** of WHO Member States report to have less than 10 medical doctors per 10,000 population

**Adequate sanitation**

- **68%** of the world’s population had access to improved sanitation facilities in 2015

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The Global Health Observatory theme pages provide data and analyses on global health priorities. Each theme page provides information on global situation and trends highlights, using core indicators, database views, major publications and links to relevant web pages on the theme.

**SDG health and health-related target indicators**

3.1 Maternal mortality
- Maternal health

3.2 Newborn and child mortality
- Child health

3.3 Communicable diseases
- HIV/AIDS
- Tuberculosis
- Malaria
- Neglected tropical diseases
- Cholera
- Influenza
- Meningitis
- Sexually transmitted infections
- Antimicrobial resistance (AMR) country self-assessment
- Global Antimicrobial Resistance Surveillance System (GLASS)

3.4 Noncommunicable diseases and mental health
- Noncommunicable diseases
- Mental health

3.5 Road traffic injuries
- Road safety

3.6 Universal health coverage
- Universal health coverage data portal
- Public health and environment

3.7 Sexual and reproductive health
- Universal access to reproductive health
- Public health and environment

3.8 Universal health coverage
- Universal health coverage data portal
- Public health and environment

3.9 Mortality from environmental pollution
- Public health and environment

3.a Tobacco control
- Tobacco control

3.b Essential medicines and vaccines
- Essential medicines
- Essential health technologies
- Immunization
- Health R&D

3.c Health financing and health workforce
- Health financing
- Health workforce

2.2 Child malnutrition
- Stunting, wasting and overweight in children

6.1 Drinking water
6.2 Sanitation and hygiene
- Water and sanitation

7.1 Clean household energy
11.6 Clean cities
- Public health and environment
- Urban health

16.1 Violence
- Violence prevention
- Violence against women

17.6 Technology
- e-Health

Monitoring health for the SDGs

Data and analyses for health and health-related SDGs
Global Health Observatory (GHO) data

Global situation and trends: TB is one of the top 10 causes of death and the leading cause from a single infectious agent (above HIV/AIDS). Millions of people continue to fall sick with TB each year. In 2017, TB caused an estimated 1.3 million deaths (range, 1.2–1.4 million) among HIV-negative people and there were an additional 500 000 deaths from TB (range, 266 000–300 000) among HIV-positive people.

View full size graph
Download: 110kb
Read more

Inocence
10 million
new TB cases in 2017

Mortality
1.3 million
TB deaths among HIV-negative people in 2017

Lives saved
54 million
through effective diagnosis and treatment between 2000 and 2017

More TB data products:
Download more TB data
Maps
Reports
Country profiles
Links
Tuberculosis (TB)

Tuberculosis country profiles

Tuberculosis country profiles are generated automatically based on data reported by countries and which are held in WHO's global TB database. Countries can update information at any time via WHO's TB data collection system (or, for countries in the European region, via the ECDC - WHO Europe Joint Surveillance system). Therefore data in country profiles may differ slightly from the data available at the time Global Tuberculosis Report was written.

TB burden estimates and country-reported TB data

(available for all countries and territories asked to report TB data to WHO)

Country/territory: South Africa
Language: English Español Français Русский
Format: Web page PDF

Indicators in the Sustainable Development Goals associated with TB incidence

(available for all countries and territories asked to report TB data to WHO)

Country/territory: Afghanistan
Format: Web page PDF

Financing for TB prevention, diagnosis and treatment

(available for a subset of countries and territories asked to report detailed TB financial data to WHO)

Country/territory: Afghanistan
Format: Web page PDF
South Africa

Population 2018: 68 million

<table>
<thead>
<tr>
<th>Tuberculosis profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Rate per 100 000 population per year)</td>
</tr>
<tr>
<td>Total TB incidence</td>
</tr>
<tr>
<td>New and relapse TB cases notified</td>
</tr>
<tr>
<td>HIV-positive TB incidence</td>
</tr>
<tr>
<td>HIV-negative TB mortality</td>
</tr>
</tbody>
</table>

**Estimates of TB burden, 2018**

<table>
<thead>
<tr>
<th></th>
<th>Number (thousands)</th>
<th>Rate (per 100 000 population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total TB incidence</td>
<td>301 (215–400)</td>
<td>520 (373–691)</td>
</tr>
<tr>
<td>HIV-positive TB incidence</td>
<td>177 (127–235)</td>
<td>306 (219–406)</td>
</tr>
<tr>
<td>MDR/RR-TB incidence</td>
<td>11 (7.2–16)</td>
<td>19 (12–26)</td>
</tr>
<tr>
<td>HIV-negative TB mortality</td>
<td>21 (20–23)</td>
<td>37 (35–39)</td>
</tr>
<tr>
<td>HIV-positive TB mortality</td>
<td>42 (30–51)</td>
<td>73 (51–96)</td>
</tr>
</tbody>
</table>

**Estimated proportion of TB cases with MDR/RR-TB, 2018**

New cases: 3.4% (2.5–4.3)
Previously treated cases: 7.1% (4.8–9.5)

**TB case notifications, 2018**

Total new and relapse: 227,999
-% tested with rapid diagnostics at time of diagnosis: 71%
-% with known HIV status: 90%
- % pulmonary: 89%
- % bacteriologically confirmed**: 70%
- % children aged 0–14 years: 7%
- % women: 37%
- % men: 63%
Total cases notified: 238,652

**Universal health coverage and social protection**

TB treatment coverage (notified/estimated incidence), 2018: 76% (67–84)
TB patients facing catastrophic total costs
TB case fatality ratio (estimated mortality/estimated incidence), 2018: 22% (14–30)

**TB/HIV care in new and relapse TB patients, 2018**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with known HIV status who are HIV-positive</td>
<td>120,062</td>
<td>59%</td>
</tr>
<tr>
<td>- on antiretroviral therapy</td>
<td>104,625</td>
<td>67%</td>
</tr>
</tbody>
</table>

**Drug-resistant TB care, 2018**

% of bacteriologically confirmed TB cases tested for rifampicin resistance**:
- New cases: 92%
- Previously treated cases: 94%
Laboratory-confirmed cases:
MDR/RR-TB: 13,199, XDR-TB: 553
Patients started on treatment**
MDR/RR-TB: 9,558, XDR-TB: 539
MDR/RR-TB cases tested for resistance to second-line drugs: 7,469

**Treatment success rate and cohort size**

<table>
<thead>
<tr>
<th></th>
<th>Success</th>
<th>Cohort</th>
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</thead>
<tbody>
<tr>
<td>New and relapse cases registered in 2017</td>
<td>77%</td>
<td>240,332</td>
</tr>
<tr>
<td>Previously treated cases, excluding relapse, registered in 2017</td>
<td>59%</td>
<td>8,508</td>
</tr>
</tbody>
</table>

**Notified cases by age group and sex, 2018**

- Females
- Males
- Incidence

**Treatment success rate (%)**

- 77%
- 59%
Global Health Observatory indicator views

Browse data tables by indicator

The GHO "By indicator" provides a list of all indicators for which the Observatory contains data. Each indicator page consists of a link to the definition of the indicator and a series of links to the various data views that contain information about the selected indicator.

Information regarding browsing, searching, and downloading data from the repository is available under "About the Observatory".

In this section:
A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | R | S | T | U | V | W | Y | Z | 1

- Alcohol, abstainers lifetime (%) (Global Information System on Alcohol and Health)
- Alcohol, abstainers past 12 months (%) (Global Information System on Alcohol and Health)
- Access restrictions to maintenance treatment (Resources for Substance Use Disorders)
- Action Plan for implementation of alcohol policy (Global Information System on Alcohol and Health)
- Adolescent birth rate (per 1000 women aged 15-19 years) (Global strategy for women’s, children’s and adolescents’ health)
- Adolescent birth rate (births per 1000 women aged 15 to 19) (Urban health)
- Adolescent mortality rate (per 100 000 population) (Global strategy for women’s, children’s and adolescents’ health)
- Adopted written national policy on alcohol (Global Information System on Alcohol and Health)
- Adult mortality rate (probability of dying between 15 and 60 years per 1000 population) (Mortality and global health estimates)
- Advertising restrictions at cinemas (Global Information System on Alcohol and Health)
- Advertising restrictions at point-of-sale (Global Information System on Alcohol and Health)
- Advertising restrictions in print media (Global Information System on Alcohol and Health)
- Advertising restrictions on billboards (Global Information System on Alcohol and Health)
- Advertising restrictions on cable television (Global Information System on Alcohol and Health)
- Advertising restrictions on local radio (Global Information System on Alcohol and Health)
- Advertising restrictions on national radio (Global Information System on Alcohol and Health)
- Advertising restrictions on national television (Global Information System on Alcohol and Health)
- Advertising restrictions on social media (Global Information System on Alcohol and Health)
- Advertising restrictions on the internet (Global Information System on Alcohol and Health)
- Age limits on-licence service (Global Information System on Alcohol and Health)
- Age limits off-premise sales (Global Information System on Alcohol and Health)
What is the adolescent fertility rate for Ghana over time? How does it compare globally? How does it compare regionally?

General Resource to investigate:

World Bank Open Data
Adolescent fertility rate (births per 1,000 women ages 15-19)


License: CC BY-4.0
Adolescent fertility rate (births per 1,000 women ages 15-19) - Ghana, World, Sub-Saharan Africa

License: CC BY 4.0
Adolescent fertility rate (births per 1,000 women ages 15-19) - Ghana, World, Sub-Saharan Africa

Adolescent fertility rate is the number of births per 1,000 women ages 15-19.

**ID:** SP.ADO.TFRT

**Source:** United Nations Population Division, World Population Prospects.

**License:** CC BY-4.0

**Aggregation Method:** Weighted average

**Long Definition:** Adolescent fertility rate is the number of births per 1,000 women ages 15-19.

**Periodicity:** Annual

**Statistical Concept and Methodology:** Reproductive health is a state of physical and mental well-being in relation to the reproductive system and its functions and processes. Means of achieving reproductive health include education and services during pregnancy and childbirth, safe and effective contraception, and prevention and treatment of sexually transmitted diseases. Complications of pregnancy and childbirth are the leading cause of death and disability among women of reproductive age in developing countries. Adolescent fertility rates are based on data on registered live births from vital registration systems or, in the absence of such systems, from censuses or sample surveys. The estimated rates are generally considered reliable measures of fertility in the recent past. When no empirical information on age-specific fertility rates is available, a model is used to estimate the share of births to adolescents. For countries without vital registration systems fertility rates are generally based on
Regional: I would like to compare abortion policies in Ethiopia and Rwanda.

World view: I also want to map countries where authorization of a health professional is required for access to safe abortion.

Subject-specific Resource to investigate:

Global Abortions Policies Database
Global Abortion Policies Database

A tool to expand knowledge, encourage transparency, and promote accountability.
Please select at least two countries and a filter to see results.

1. Countries & regions
   - Ethiopia
   - Rwanda

2. Filters
   - At the woman's request
     - Abortion at woman's request with no requirement for justification - See all

   - Legal Ground and Gestational Limit
     - Economic or social reasons
     - Foetal impairment
     - Mental health
     - Physical health
     - Health

   - Additional Requirements to Access Safe Abortion
     - Authorization of health professional(s)
     - Authorization in specially licensed facilities only

   - Clinical and Service-delivery Aspects of Abortion Care
     - Methods allowed
     - Where can abortion services be provided

   - Conscientious Objection
     - Public sector providers
     - Private sector providers
     - Provider type not specified
     - Neither type of provider permitted
     - Public facilities
     - Private facilities
     - Facility type not specified
     - Neither type of facility permitted

3. Indicators
   - Maternal mortality ratio

4. Advanced filters
   - View human rights treaties signed
   - View concluding observations
   - View penalties

See Results
<table>
<thead>
<tr>
<th>Country</th>
<th>Economic or social reasons</th>
<th>Fetal impairment</th>
<th>Mental health</th>
<th>Physical health</th>
<th>Health</th>
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<tr>
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<td>✔ 2</td>
<td>✗ 1</td>
<td>✗ 1</td>
<td>✗ 2</td>
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</tbody>
</table>

**Gestational limit: 28**

Download data in this table  Download data for all countries

**Additional Requirements to Access Safe Abortion**
Foetal impairment

Yes

Related documents:

Gestational limit

Weeks: 28

- Standard Treatment Guidelines for General Hospital (page 635)
- Technical and procedural guidelines for safe abortion services in Ethiopia 2014 (page 8)

WHO Guidance

The following descriptions and recommendations were extracted from WHO guidance on safe abortion.

A woman is entitled to know the status of her pregnancy and to act on this information; health protection or social reasons can be interpreted to include distress of the pregnant woman caused by the diagnosis of fetal impairment. Prenatal tests and other medical diagnostic services cannot legally be refused because the woman may decide to terminate her pregnancy. Safe Abortion Guidelines, § 4.2.1.4.

Source document: WHO Safe Abortion Guidance (page 103)
Abortion at woman’s request

- At woman’s request with no requirement for justification
<table>
<thead>
<tr>
<th>Legal Ground and Gestational Limit</th>
<th>Additional Requirements to Access Safe Abortion</th>
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<tbody>
<tr>
<td>Economic or social reasons</td>
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<td>Foetal impairment</td>
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<td>Rape</td>
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<td>Incest</td>
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<td>Intellectual or cognitive disability of the woman</td>
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<td>Mental health</td>
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<td>Physical health</td>
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<td>Life</td>
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<td>Other</td>
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</table>
Clinical and Service-delivery Aspects of Abortion Care

- National guidelines for induced abortion
- Methods allowed
- Country recognized approval (mifepristone / mife-misoprostol)
- Country recognized approval (misoprostol)
- Where can abortion services be provided
- National guidelines for post-abortion care
- Where can post abortion care services be provided
- Contraception included in post-abortion care
- Insurance to offset end user costs
- Who can provide abortion services
- Extra facility/provider requirements for delivery of abortion services
- Public sector providers
- Private sector providers
- Provider type not specified
- Neither type of provider permitted
- Public facilities
- Private facilities
- Facility type not specified
- Neither type of facility permitted
### Identified Policy and Legal Sources Related to Abortion

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</table>
According to the most recent DHS, what percentage of married women are currently using any traditional or folk method of contraception? Which country stands out?

Resource to investigate:

Family Planning Indicator Data  |  DHS Program
FAMILY PLANNING

For more than 30 years, The DHS Program has been a primary source of data on family planning use. Family planning data are available in over 80 countries.

Family Planning Indicator Data

Select Country:

Select Indicator:

Featured country: Benin
Married women currently using any method of contraception

16.4 18.6 16.9 12.9 15.5
<table>
<thead>
<tr>
<th>Country</th>
<th>Most Recent Survey</th>
<th>Total</th>
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<td>Afghanistan</td>
<td>DHS 2015</td>
<td>2.7 %</td>
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<td>Albania</td>
<td>DHS 2017-18</td>
<td>41.4 %</td>
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<tr>
<td>Angola</td>
<td>DHS 2015-16</td>
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</tr>
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<td>Armenia</td>
<td>DHS 2015-16</td>
<td>29.2 %</td>
</tr>
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<td>Azerbaijan</td>
<td>DHS 2006</td>
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<td>DHS 2014</td>
<td>8.4 %</td>
</tr>
<tr>
<td>Benin</td>
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<td>Botswana</td>
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<td>Brazil</td>
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<td>Congo Democratic Republic</td>
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</table>
"Miss Peterson, may I go home? I can't assimilate any more data today."
Sincere thanks

मैंने स्विल्सें यांत्रिक