

| MORBIDITY OF MAJOR DISEASES SUCH AS HIV/AIDS, MALARIA, TUBERCULOSIS |                         |                |
|---------------------------------------------------------------------|-------------------------|----------------|
| Health                                                              | Health status and risks | Core indicator |

### 1. INDICATOR

- (a) **Name:** Morbidity of major diseases such as HIV/AIDS, malaria, tuberculosis
- (b) **Brief Definition:** Prevalence and/or incidence related to major diseases.
- (c) **Unit of Measurement:** Cases of prevalence or incidence per 100 000 people.
- (d) **Placement in the CSD Indicator Set:** Health/Health status and risks.

### 2. POLICY RELEVANCE

- (a) **Purpose:** The indicator measures the morbidity caused by major diseases. It also provides important information on the success of measures to fight major diseases.
- (b) **Relevance to Sustainable/Unsustainable Development (theme/sub-theme):**  
The goals of sustainable development can only be achieved in the absence of a high prevalence of debilitating diseases. HIV/AIDS, malaria, tuberculosis and other diseases are major impediments to sustainable development, especially in many developing countries.
- (c) **International Conventions and Agreements:**
- (d) **International Targets/Recommended Standards:** Under Millennium Development Goal 6 “Combat HIV/AIDS, malaria and other diseases”, both target 7 “have halted by 2015 and begun to reverse the spread of HIV/AIDS” and target 8 “have halted by 2015 and begun to reverse the incidence of malaria and other major diseases” are relevant for this indicator.
- (e) **Linkages to Other Indicators:** This indicator is closely related to other health indicators as well as to indicators on poverty and economic development.

### 3. METHODOLOGICAL DESCRIPTION

- (a) **Underlying Definitions and Concepts:** Diseases are classified according to the International Statistical Classification of Diseases and Related Health Problems (ICD). Incidence of diseases refers to the number of cases arising in a given time period. Prevalence refers to the number of people suffering from the disease at a given point of time.  
The indicator is computed separately for each relevant disease by dividing the number of cases arising in a given time period (incidence), the number of people suffering from the disease at a given point of time (prevalence), and then multiplying the result by 100

000. The indicator can be calculated separately for men, women and both sexes. It can also be broken down by age group.

**(b) Measurement Methods:**

Exact measurement methods depend on the diseases chosen. Prevalence data of HIV/AIDS is obtained through national HIV surveillance systems, which may include national population surveys with HIV testing. In concentrated and low level epidemics, surveillance focuses on high-risk populations. Standardized tools and methods of estimation developed by UNAIDS and WHO are used to estimate overall, gender and age-specific prevalence rates. Prevalence of tuberculosis can be estimated based on population-based surveys. In the absence of such surveys, prevalence can be estimated based on incidence estimates. Incidence of tuberculosis is estimated based on notified cases, prevalence surveys and/or information from death (vital) registration systems. Details of all these estimation methods are available through WHO. Similar methods exist for other diseases.

**(c) Limitations of the Indicator:** Limitations in reporting mechanisms and estimation methods may lead to underreporting of certain diseases or imprecise indicator values. This also limits the comparability of data across countries. Changes in reporting mechanism and estimation methods may affect changes in the data of morbidity of diseases over time.

**(d) Status of the Methodology:** Methodologies for most diseases are under constant review by the WHO.

**(e) Alternative Definitions/ Indicators:** The indicator could be calculated separately for children. On a global level, diarrhoeal diseases, pneumonia, malaria, neonatal causes, measles and HIV/AIDS are among the most deadly diseases for children.

In addition to morbidity, disease specific mortality rates provide important information on the impact of major diseases in form of death toll. Death rates associated with malaria and tuberculosis are included in the MDG Indicators. Death rates associated with HIV/AIDS, tuberculosis, non-communicable diseases, cardio-vascular diseases and cancer are included in the WHO Core Health Indicators, as well as death rates for children associated with diarrhoeal diseases, pneumonia, malaria, neonatal causes, measles and HIV/AIDS.

Complementary indicators on responses by health systems to major diseases provide important information. Indicators used in the context of MDG monitoring include "Percentage of population with advanced HIV infection with access to antiretroviral drugs" (Recommended as alternative to "Population with access to essential drugs"), "Proportion of children under 5 sleeping under insecticide-treated bednets and proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs" and "Proportion of tuberculosis cases detected and cured under directly observed treatment short course". These indicators are also included in the WHO Core Health Indicators, together with indicators on treatment of children with acute respiratory syndromes (ARI) and with diarrhoea.

#### 4. ASSESSMENT OF DATA

(a) **Data Needed to Compile the Indicator:** Administrative data, household surveys, data from death (vital) registration systems and/or national estimates for the nominator and population data from censuses or other sources for the denominator. International data may include estimation techniques ensuring the comparability of data across countries and is typically based on internationally agreed population estimated provided by the United Nations Population Division.

(b) **National and International Data Availability and Sources:** Coverage of diseases varies across countries due to variations in relevance of diseases and in quality of health information systems. WHO regularly publishes data on all major diseases.

(c) **Data References:** Data on all MDG indicators on HIV/AIDS, Malaria and Tuberculosis is available from the MDG database, available at <http://mdgs.un.org/unsd/mdg/>

Death rates, prevalence and incidence rates for a number of diseases are included in the WHO Core Health Indicators, see [http://www3.who.int/whosis/core/core\\_select.cfm](http://www3.who.int/whosis/core/core_select.cfm)  
Estimates on death rates by cause for all WHO member states are included in WHO's Global Burden of Disease Estimates, available at <http://www.who.int/healthinfo/bodestimates/en/index.html>

#### 5. AGENCIES INVOLVED IN THE DEVELOPMENT OF THE INDICATOR

(a) **Lead Agency:** The lead agency is the World Health Organization. The contact point is the Director, Measurement & Health Information and/or Co-ordinator, Health Statistics and Evidence.

#### 6. REFERENCES

(a) **Readings:**

World Health Organization (WHO), The World Health Report, Geneva, various years.

WHO, World Health Statistics, Geneva, various years.

WHO, International Statistical Classification of Diseases and Related Health Problems - 10<sup>th</sup> Revision, Second edition, Geneva, 2005.

(b) **Internet sites:**

<http://www.who.int/whosis/en/index.html>

<http://mdgs.un.org/unsd/mdg/Default.aspx>