

Technical Notes

Definitions

1. Infant mortality rate (IMR)

-1

The number of infant deaths (excluding foetal deaths) between birth and first birthday in the population of a given area during a calendar year (or annual average infant death rate in a given period) (D^t_o) per 1,000 live births (B^t):

$$\text{IMR} = \frac{D_o^t}{B^t} \times 1000$$

2. Child mortality rate (U5MR)

-2

The probability of dying before the age of five, expressed as deaths under the age of five per 1,000 live births:

$$\text{U5MR} = \frac{\text{child deaths}}{\text{live births}} \times 1000$$

3. General fertility rate (GFR)

-3

The number of live births in a particular calendar year (or average live births in a given period) in a given area (B^t_o) per 1,000 mid-year female population of childbearing age (15-49) (F₁₅₋₄₉):

$$\text{GFR} = \frac{B_o^t}{F_{15-49}} \times 1000$$

4. Age-specific fertility rate (ASFR)

-4

The number of births (${}_nB_x$) per 1,000 women in a particular age group (${}_nF_x$) during a calendar year:

$({}_nF_x)$ $({}_nB_x)$
:

ASFR = $\frac{{}_nB_x}{{}_nF_x} \times 1000$

5. Total fertility rate (TFR)

-5

The number of children that would be born to a woman if she were to live to the end of her childbearing years (15-49) and if the likelihood of her giving birth to children at any given age were to be the currently-prevailing age-specific fertility rate. It is the total of all the age-specific fertility rates defined over a five-year interval (n):

$(\quad 49 \quad 15 \quad)$

:(n)

TFR = $\sum_{15}^{49} \left(\frac{{}_nB_x}{{}_nF_x} \right)$

6. Mean age at first marriage

-6

The mean age at which an individual first marries. For a given calendar year, it can be calculated using the first marriage rates by age (that is, the number of first marriages at age x in relation to the average population of age x). Using this calculation, the mean age is not weighted, meaning that the number of women or men at each age is not taken into account.

$(\quad)$ $\cdot ((x)$ (x)

GLOSSARY OF STATISTICAL TERMS

Age-specific fertility rate Number of births to women in a particular age group, divided by the number of women in that age group. The age groups used are 15-19, 20-24, 25-29, 30-34, 35-39, 40-44 and 45-49. The data refer to five-year periods running from 1 July of the initial year to 30 June of the final year.

$$\frac{\text{19-15 : 39-35} \times \text{34-30} \times \text{29-25} \times \text{24-20} \times \text{19-15}}{\text{49-45} \times \text{44-40} \times \text{39-35} \times \text{34-30} \times \text{29-25} \times \text{24-20} \times \text{19-15}} \times 1000$$

Base population The number of people in a given area (for example, a nation, province or city) to which a specific vital rate applies; that is, the denominator of the crude birth rate or death rate, the population being determined from census data.

$$\left(\frac{\text{Base population}}{\text{Base population}} \right)$$

Births Average annual number of births over a given period. The data refer to five-year periods running from 1 July of the initial year to 30 June of the final year and data are presented in thousands.

$$\frac{\text{Births}}{\text{Base population}} \times 1000$$

Births by age group of mother Number of births over a given period classified by age group of mother (15-19, 20-24, 25-29, 30-34, 35-39, 40-44 and 45-49). The data refer to five-year periods running from 1 July of the initial year to 30 June of the final year. Data are presented in thousands.

$$\frac{\text{29-25} \times \text{24-20} \times \text{19-15} \times \text{49-45} \times \text{44-40} \times \text{39-35} \times \text{34-30}}{\text{49-45} \times \text{44-40} \times \text{39-35} \times \text{34-30} \times \text{29-25} \times \text{24-20} \times \text{19-15}} \times 1000$$

Census	A survey conducted on the full set of observation objects belonging to a given population or universe.	.
Census population	Latest census population, covering all residents, regardless of legal status or citizenship, except for refugees not permanently settled in the country of asylum. Data are presented by nationals and non nationals, by sex, and by rural and urban areas per country. In addition, census population data for each of the above disaggregations are presented by five-year age group for each country.	. . .
Deaths by sex	Number of deaths over a given period, classified by sex (male, female and both sexes combined). The data refer to five-year periods running from 1 July of the initial year to 30 June of the final year and data are presented in thousands.	.( ) / 1 / 30
Deaths under age 1	Number of deaths under age 1 over a given period. The data refer to five-year periods running from 1 July of the initial year to 30 June of the final year and data are presented in thousands.	. / 1 / 30
Deaths under age 5	Number of deaths under age 5 over a given period. The data refer to five-year periods running from 1 July of the initial year to 30 June of the final year. Data are presented in thousands.	. / 1 / 30

Dependency ratios	The total dependency ratio is the ratio of the sum of the population aged 0-14 plus that aged 65 and over to the population aged 15-64. The child dependency ratio is the ratio of the population aged 0-14 to the population aged 15-64. The old-age dependency ratio is the ratio of the population aged 65 years and over to the population aged 15-64. All ratios are presented as number of dependants per 100 persons of working age (15-64).	$\frac{15 + 65}{64} \times 100$
Divorce	The final dissolution of a marriage, that is, the separation of husband and wife which confers on the parties the right to remarriage under civil, religious and/or other provisions, according to the laws of each country.	$\frac{\text{Number of divorces}}{\text{Number of marriages}} \times 100$
Estimation	The process of inferring the numerical value of unknown population values from incomplete data, such as a sample.	$\frac{\text{Sample value}}{\text{Sample size}} \times \text{Population size}$
Infant mortality	The probability (expressed as deaths per 1,000 live births) of a child born in a specified year dying before reaching the age of 1 if subject to current age-specific mortality rates.	$\frac{\text{Deaths of infants}}{\text{Live births}} \times 1,000$
Life expectancy by sex	The average number of years of life expected by a hypothetical cohort of individuals if subject throughout their lives to the mortality rates of a given period, expressed in years.	$\frac{\text{Total years lived}}{\text{Number of individuals}} \times 100$

Marriage	The act, ceremony or process by which the legal relationship of husband and wife is constituted. The legality of the union may be established by civil, religious or other means, as recognized by the laws of each country.	.
Mean age at first marriage	The weighted average of the age at first marriage, using as weights the age-specific marriage rates for first marriages only.	.
Mortality under age 5	Probability of death between birth and fifth birthday, expressed as deaths per 1,000 births.	.
Population	De facto population of a country, area or region as at 1 July of the year indicated. Figures are presented in thousands.	. / 1
Population by age group	De facto population as at 1 July of the year indicated for the age group indicated (presented in thousands), and the percentage of the total population that it represents. The population age groups are: 0-4, 0-14, 5-14, 6-11, 12-14, 15-17, 18-23, 15-24, 15-59, 15-64, 60 or over, 65 or over and 80 or over.	/ 1 ( ) : 17-15 14-12 11-6 14-5 14- 4- 65 60 64-15 59-15 24-15 23-18 80
Population at risk	The population that is exposed to the occurrence of a vital event, for example, the total population in the case of deaths or the legally-married population in the case of divorces.	.

Population census	The process of collecting, compiling, evaluating, analyzing and publishing or otherwise disseminating demographic, economic and social data pertaining, at a specified time, to all persons in a country or in a well-delimited part of a country.		
Population estimates	Country estimates, disaggregated by sex, presented in a time series from 2000 until 2007.	.2007	2000
Population projections	Estimates of total size or composition of populations in the future.		
Proportion	A special type of ratio in which the denominator is a quantity that represents the whole of a given group under investigation and the numerator is a subset of it.	.	
Rate	The occurrence of events over a specific interval. It also refers to the measure of the frequency of a phenomenon of interest.	.	.
Ratio	The relationship between two quantities measured in the same unit, expressed as one value divided by another. The result has no unit.	.	.

Registration of vital events	Continuous, permanent and compulsory recording of the occurrence of vital events, together with certain identifying or descriptive characteristics relating to such events, regulated by the civil code, laws or regulations of each country. Such vital events may include live births, deaths, foetal deaths, marriages, divorces, judicial separations, marriage annulments, adoptions, recognitions (legal acknowledgement of natural children) and legitimations.	.
Rural population	De facto population living in areas classified as rural (that is, the difference between the total population of a country and its urban population). Data refer to 1 July of the year indicated and are presented in thousands.	$\frac{\text{Total population} - \text{Urban population}}{\text{Total population}} \times 100$
Population sex ratio	Number of males per 100 females in the population.	.
Sex ratio at birth	Number of male births per single female birth.	.
Total fertility rate	The average number of children a hypothetical cohort of women would have at the end of their reproductive period if they were subject throughout their lives to the fertility rates of a given period and not subject to mortality; expressed as number of children per woman.	.

Urban population	Given national differences in the characteristics that distinguish urban from rural areas, the distinction between urban and rural population is not amenable to a single definition applicable to all countries. National definitions are commonly based on size of locality; any population that is not urban is considered rural.	.	.
Vital event	A live birth, death, foetal death, marriage, divorce, adoption, legitimation, recognition of parenthood, annulment of marriage or legal separation.	.	.
Women aged 15-49	Number of women aged 15-49 as at 1 July of the year indicated (presented in thousands) and that number as a percentage of the total female population as at 1 July of that year.	/ 1 49 15 . / 1	49 15