

Indicator name	Mortality rate of children under age 5				
	<i>Total</i>	<i>Male 0-4 years</i>	<i>Female 0-4 years</i>	<i>Total 0-4 years</i>	<i>0-4 years (%)</i>
All Causes	58,771,791	5,408,078	4,989,323	10,397,401	18%
Diarrhoeal diseases	2,163,283	907,236	839,564	1,746,800	81%
Malaria	889,186	397,382	373,568	770,949	87%
Schistosomiasis	41,087	22	17	40	n/a ²
Lymphatic filariasis	290	24	16	40	14%
Onchocerciasis	65	0	0	0	n/a ²
Dengue	18,104	2,299	1,696	3,995	22%
Japanese encephalitis	10,988	2,256	3,053	5,309	48%
Trachoma	108	28	1	29	27%
Intestinal nematode infections	6,481	1,167	1,146	2,313	36%
Protein-energy malnutrition	250,562	71,264	64,254	135,517	54%
Drowning¹	388,000	34,284	24,184	58,467	15%
1. Drowning is a major, non-communicable water-associated health problem.					
2. % equal or less than zero					
Prepared by	WHO				
Example	See updated table WWDR2, Chapter 6, Table 6.2				
Rationale	Many of the water-related diseases are especially relevant to children and the database for estimating child mortality is much better developed than for adult mortality. This provides a strong rationale for using the under-five mortality rate in the context of monitoring the burden of water-related diseases.				
Position in DPSIR chain	Impact				
Definition of indicator	Probability of dying between birth and exactly five years of age expressed per 1000 live births.				
Underlying definitions and concepts	Under-five : between birth and exactly five years of age				
Specification of determinants needed	Number of deaths of children under five years of age for a particular year Number of live births in the same calendar year.				
Computation	The direct way to measure the probability of dying between birth and age five would be to follow a cohort of births and record the proportion of children in that cohort who die before their fifth birthday. However, usually an indirect form of calculation is used: the number of deaths of children under five years of age and the number of live births are obtained in the same calendar year. The assumption in this indirect calculation is that the number of live births does not change significantly from one year to the next.				
Units of measurements	Numbers are expressed in millions unless otherwise indicated.				
Data sources, availability and quality	WHO, The Global Burden of Disease: 2004 Update http://www.who.int/evidence/bod (Accessed 03 March 2009) UNICEF: http://www.unicef.org/publications/index.html (Accessed 03 March 2009) and the annual publication State of the Worlds Children. At the national level, the best source of data is a complete vital statistics registration system – one covering at least 90% of vital events in the population. Such systems are uncommon in developing countries, so estimates are often obtained from surveys. Surveys estimating deaths require large samples. Often, indirect or modelling approaches are used with data from censuses or demographic surveys.				
Scale of application	Global				
Geographical coverage	Global				

Interpretation	The under-five mortality rate is one of the most important social indicators of development. It is an indicator of quality of life, including income and education of parents, efficacy of health services, access to safe drinking water and sanitation etc. Under-five mortality is part of a chain of indicators, with poverty as the driving force.
Linkage with other indicators	None reported.
Alternative methods and definitions	None reported.
Related indicator sets	A related indicator is the infant mortality rate, which is a less suitable indicator than the under-five mortality rate in the context of water-related diseases.
Sources of further information	WHO, http://www.who.int/whosis/indicators/compendium/2008/1ms5/en/index.html (Accessed 03 March 2009) UNICEF. 2007. Progress for children. New York, UNICEF (http://www.childinfo.org/files/progress_for_children_2007.pdf , (Accessed 03 March 2009))
Other institutions involved	UNICEF, United Nations Population Division, United Nations Statistical Division, World Bank, US Bureau of Census