Definitions
Probability of dying between birth and 5 years of age, expressed per 1,000 live births.

Numerator
Number of deaths in children under 5 years of age multiplied by 1,000.

Denominator
Number of live births in the same year and place.

Measuring unit
X per 1,000 live births.

Considerations for indicator quality
As with other mortality indicators, it is challenging to obtain accurate mortality rates in children under 5 years of age, given the difficulties in adequately classifying deaths, as well as the promptness and coverage of newborn registries, which many times vary according to the place (urban, rural), or ethnic group.

Interpretation implications
This indicator is not strictly a rate, but an estimated probability of death before the 5th birthday. The number of live births is used as a proxy for the number of children under 5 years of age, so the estimate is subject to greater errors in contexts of low birth and death registration coverage. Statistical estimation methods have been applied to overcome some of these limitations. See, for example, the United Nations inter-agency group estimate. Some methods for estimating this indicator are:

• Civil registry: the number of deaths at the age of 0 to 5 years for a place and year multiplied by 1,000 is used as a numerator; and as a denominator, the population of live births for the same place and year is used.
• Censuses and surveys: indirect method, after investigating how many births women of reproductive age have had and how many have survived; the Brass method is applied with this information.
• Surveys: direct method based on birth history that includes a series of specific questions for each son/daughter that have been had. To reduce sampling errors, estimates by this means are usually presented grouping 5 or 10 years prior to the survey.

Context indicator
The probability of dying before the 5th birthday is a sensitive indicator to the social determinants of health, because it covers a longer period of exposure to them than infant mortality. It was found that the reductions in the mortality rate in children under 5 years of age were explained by 55% because of: increase in the mother’s schooling, increase in household income, internal migration, decrease in fertility rates, decrease in low birth weight, increase in early-onset infant lactation, increase in the prevalence of contraceptive use, decrease in childbirths (number of children per woman), and access to improved sanitation facilities.

ODS framework
EWEC-LAC framework | Dimension | Monitoring framework | Suggested stratifier for inequality analysis
---|---|---|---
Survive | Woman | Input | Sex
Thrive | Childhood | Output | Ethnicity
Transform | Adolescence | Results | Mother’s education
Impact | Socioeconomic level (quintiles of national wealth)
Product | Place of residence (urban / rural, or geographic location)

Preferred data source
Administrative records (civil registration of births and deaths) in cases where the registration coverage is high.

Alternative data sources

Inter-agency group estimates
• Global Strategy for Women’s, Children’s and adolescents’ Health. Key indicator Survive 2
• Countdown 2030: Demographic Indicators, Infant Mortality.

Global monitoring frameworks
• https://data.unicef.org/topic/child-survival/under-five-mortality/

For more information
• https://childmortality.org/