Definitions

Risk of dying for a boy or girl before reaching the first year of life in a given place and period, if exposed to the experience of age-specific mortality.

Numerator

Number of deaths in children under 1 year 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 infant mortality rates given the difficulties in properly classifying deaths, as well as the promptness and coverage of newborn registrations, which often vary according to place (urban, rural) or specific population group, such as ethnic population. Some methods for estimating this indicator are:

- Civil registry: the number of deaths at the age of 0 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.

Interpretation implications

It is interpreted as “X” deaths in children under 1 year of age per 1,000 live births. The estimates of interagency groups go through a statistical treatment that allows a better comparison between countries. To make comparisons between sub-national units within a country, variations in sources or birth registration coverage, for example, should be considered.

Context indicator

In addition to measuring child survival, the infant mortality rate is considered an important approximation of the measure of health in the population, and reflects the association between the causes of infant mortality and other social health determinants, such as economic development, general living conditions, social well-being, environmental quality, which are the object of action programs such as vaccination, oral hydration, wastewater and excreta management, firm ground that seek to reduce infant mortality levels. Also, of the opportunity and access to adequate medical care, especially medical care related to prenatal care. A historical review of interventions for the reduction of infant mortality concludes that structural interventions such as improvements in civil registration, and sanitation such as water purification and milk pasteurization are central to reduce this phenomenon.

ODS framework

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Preferred data source

Administrative records (vital statistics / civil registration of births and deaths) in cases where registration coverage is high

Alternative data sources

- Household surveys, systematized clinical records

Inter-agency group estimates


Global monitoring frameworks

For more information

- United Nations Inter-agency Group for the Estimation of Infant Mortality. [https://childmortality.org/](https://childmortality.org/)

References

- [https://childmortality.org/](https://childmortality.org/)