**DEMOGRAPHIC METHODS**

**ASSIGNMENT-1**

**INFANT MARTALITY RATE (IMR):**

Infant mortality rate (IMR) is the number of deaths **per 1,000** live births of children under one year of age. The rate for a given region is the number of children dying under one year of age, divided by the number of live births during the year, multiplied by 1,000.

X 1,000

**Causes** of infant mortality and deaths that are related to medical conditions include: **low** birth weight, sudden infant death syndrome, malnutrition, congenital malformations, and infectious diseases, **low** income **for** health care including neglected tropical diseases.

However, the method of calculating IMR often varies widely between countries and is based on how they define a live birth and how many premature infants are born in the country. Reporting of infant mortality rates can be inconsistent, and may be understated, depending on a nation's live birth criterion, vital registration system, and reporting practices. The reported IMR provides one statistic which reflects the standard of living in each nation. Changes in the infant mortality rate reflect social and technical capacities] of a nation's population. The [World Health Organization](https://en.wikipedia.org/wiki/World_Health_Organization) (WHO) defines a live birth as any infant born demonstrating independent signs of life, including breathing, heartbeat, umbilical cord pulsation or definite movement of voluntary muscles. This definition is used in Austria, for example. The WHO definition is also used in Germany, but with one slight modification: muscle movement is not considered to be a sign of life. Many countries, however, including certain European states (e.g. France) and Japan, only count as live births cases where an infant breathes at birth, which makes their reported IMR numbers somewhat lower and increases their rates of prenatal mortality. In the Czech Republic and Bulgaria, for instance, requirements for live birth are even higher.

**NEONATAL MORTALITY RATE (NMR):**

Number of deaths during the first 28 completed days of life per 1000 live births in a given year or period. Neonatal deaths may be subdivided into early neonatal deaths, occurring during the first seven days of life, and late neonatal deaths, occurring after the seventh day but before the 28 completed days of life

X1, 000

The NMR is a key outcome indicator for newborn care and directly reflects prenatal, intrapartum, and neona­tal care. In addition, as infant mortality rates decline, the proportion of infant deaths that occur in the neona­tal period typically increases.

The NMR differs from the prenatal mortality rate in that it focuses only on deaths among live births and covers a longer period af­ter birth. Information on live births is generally thought to be easier to obtain than information on non-live births and is more widely available, because many popula­tion-based surveys such as the DHS typically only col­lect information on live births.

Early neonatal deaths are more closely associated with pregnancy-related fac­tors and maternal health, whereas late neonatal deaths are associated more with factors in the newborn‘s envi­ronment.

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Reference:

<https://www.measureevaluation.org/prh/rh_indicators/womens-health/nb/neonatal-mortality-rate-nmr>

<https://en.wikipedia.org/wiki/Infant_mortality#:~:text=Infant%20mortality%20rate%20(IMR)%20is,the%20year%2C%20multiplied%20by%201%2C000.>