

Infant Mortality Worksheet

DEFINITION OF TERM**Infant Mortality**

Infant mortality refers to the death of children in the first year of life.

Infant Mortality Rate¹

“A measure of the yearly rate of deaths in children less than one year old. ... This is often cited as a useful indicator of the level of health in a community.” Remember that a rate is expressed as the number of cases per 1,000 or 100,000.

FRAMING THE CONCEPT**What is the Burden of Infant Mortality?²**

“Infant mortality is used to compare the health and well-being of populations across and within countries. The infant mortality rate, the rate at which babies less than one year of age die, has continued to steadily decline over the past several decades, from 26.0 per 1,000 live births in 1960 to 6.9 per 1,000 live births in 2000. The United States ranked 28th in the world in infant mortality in 1998. This ranking is due in large part to disparities which continue to exist among various racial and ethnic groups in this country, particularly African Americans.”

EQUATION

$$\text{Infant Mortality Rate}^3 = \frac{\text{\# of deaths in a year of children < 1 year of age}}{\text{Number of live births in the same year}} \times 1,000$$

EXAMPLE

In 2000 the total number of infant (<1 year old) deaths in the U.S. was 28,000. In the U.S. in 2000 there were 4,059,000 live births.

Calculate the infant mortality rate for **the U.S. in 2000**, per 1,000 live births.

$$\begin{aligned} \text{Infant Mortality Rate} &= \frac{28,000}{4,059,000} \times 1,000 \\ &= 0.0069 \times 1,000 \\ &= 6.9 \quad \text{Per 1,000 live births} \end{aligned}$$

PROBLEM 1 – do in pairs...

In 2000 the total number of infant (<1 year old) deaths in the U.S. for African Americans was 8,784. In the U.S. in 2000 there were 623,000 African American live births.

Calculate the infant mortality rate for African American infants in **the U.S. in 2000**, per 1,000 live births and discuss the meaning and importance/relevance of your results by comparing them to the overall infant mortality rate for the U.S.

(Answer: 14.1⁴)

Develop additional problems, such as rates for other U.S. racial/ethnic groups, states in the U.S., or other nations.

¹ John M. Last (ed), *A Dictionary of Epidemiology* (3rd ed), 1995

² <http://www.cdc.gov/omhd/AMH/factsheets/infant.htm>

³ John M. Last (ed), *A Dictionary of Epidemiology* (3rd ed), 1995

⁴ http://www.census.gov/compendia/statab/vital_statistics/