Appendix 2: Measures of obstetric and paediatric mortality and morbidity

Maternal mortality ratio (MMR)

The MMR is defined as follows:

$$\text{Maternal mortality ratio} = \frac{\text{number of direct and indirect maternal deaths}}{\text{total number of confinements}} \times 100{,}000$$

The MMR excludes late maternal deaths.

Confinements is the number of pregnancies of 20 weeks' gestation or more resulting in live birth or stillbirth (regardless of plurality).

Maternal deaths in early pregnancy from direct or indirect causes are included in the numerator for the MMR even though the denominator does not include pregnancies that end before 20 weeks' gestation because the available data on the number of these pregnancies are unreliable.

Perinatal mortality rate (PMR)

The PMR is calculated as stillbirths and neonatal deaths per 1,000 total births (stillbirths and live births). For CCOPMM statistics, the rate refers to all births of at least 20 weeks' gestation or, if gestation is unknown, of birthweight of at least 400 g. However, for purposes of continuity, PMR of infants of $\geq$ 500 g or, where the birthweight is unknown, of at least 22 weeks' gestation, is also presented (PMR_{500}). For international comparisons, the rate refers to all births of at least 1,000 g birthweight or, when the birthweight is unknown, of at least 28 weeks' gestation and neonatal deaths occurring within seven days of birth (recommended by the World Health Organization).

$$\text{Perinatal mortality rate} = \frac{\text{(number of stillbirths + neonatal deaths)}}{\text{total (stillbirths + live births)}} \times 1{,}000$$

Neonatal mortality rate (NMR)

The NMR is calculated per 1,000 live births of at least 20 weeks' gestation or, if gestation is unknown, of birthweight at least 400 g.

$$\text{Neonatal mortality rate} = \frac{\text{number of neonatal deaths}}{\text{total live births}} \times 1{,}000$$

Stillbirth rate

$$\text{Stillbirth rate} = \frac{\text{number of stillbirths}}{\text{total (stillbirths + live births)}} \times 1{,}000$$

Infant mortality rate (IMR)

The IMR is calculated as the number of infant deaths divided by the number of total (Victorian-born) live births for the index year (reported as the rate per 1,000 live births). The live births are limited to those infants ≥ 20 weeks' gestation or, if the gestation is unknown, of birthweight ≥ 400 g.

Deaths during the neonatal period of infants born as the result of termination of pregnancy for congenital anomaly or maternal psychosocial indications are excluded from the IMR calculation.

$$Infant\ mortality\ rate = \frac{number\ of\ infant\ deaths}{total\ live\ births} \times 1,000$$