PERINATAL MORTALITY RATE	
GENERAL CONSIDERATIONS	
Issues	Perinatal diseases
Type of indicator	Health outcome Can also be used as a measure of action in relation to health policy and health service interventions.
Rationale	Death during the perinatal stage occurs for many different reasons, but in many cases maternal exposures to environmental hazards are major risk factors. The perinatal mortality rate thus provides a general measure of the health environment during the earliest stages of life.
Issues in indicator design	This is a well-established indicator, that is already measured and reported in many countries. It relies on routinely collected data, and definitions tend to be widely accepted. Variations in the delineation of the perinatal period do exist in some countries, however, and data quality can be uncertain in more remote areas.
SPECIFICATION	
Definition	Rate of stillbirths and deaths during the perinatal period, per 1000 births.
Terms and concepts	***Perinatal mortality:*** death of the child during the period between the 24th week of gestation and the end of the first week of life (including stillbirths).
Data needs	Number of deaths in the perinatal period Total number of births (including live and still births)
Data sources, availability and quality	Data on perinatal mortality are usually available from routine health death registration and surveillance systems. Routine data on the number of live births are available from a number of sources, including vital registrations, sample registration systems, surveillance systems and censuses and demographic surveys (such as the demographic and health surveys of world fertility surveys). Information is also collated by the UN on a regular basis. In both cases, data are generally of sound quality. In some developing countries, however, registration and surveillance procedures may be incomplete or inconsistent, especially in remote rural areas. In these cases, data may be biased towards the more affluent, urban sectors of the population. Definitions of live births and the perinatal period may also vary between countries.
Level of spatial aggregation	Administrative district
Averaging period	Annual
Computation	The indicator can be computed as a simple percentage, using the total number of births (including stillbirths) as the denominator: *1000 * (Dneo + Bstill) / (Blive + Bstill)* where: *Dneo* is the number of deaths during the 1st week of life *Bstill* is the number of stillbirths *Blive* is the number of live births.
Units of measurement	Number per 1000 births
Worked example	Assume that an area has 107 060 live births, 2 930 stillbirths and 668 deaths during the neonatal period (1st week of life). In this case the indicator is

	calculated as: 1 000 * (2 930 + 668) / (107 060 + 2 930) = 32.7 per 1 000 births
Interpretation	This indicator can be interpreted directly as a measure of risks to children during the gestational and early neonatal period. An increase in perinatal mortality may be taken to imply a deterioration in that environment; a reduction in mortality implies an improvement in the health environment. The range of factors affecting perinatal mortality is, however, large so specific risk factors – or the effects of specific interventions – cannot necessarily be inferred. Problems also exist with the quality of the data in some cases, especially in remote rural areas in developing countries. This can lead to significant bias in the data, towards urban and more affluent sectors of the population.
Variations and alternatives	This is a well-established indicator, which is routinely reported in most countries. It can, however, be redefined in slightly different ways if required. In particular, death rates can be assessed for different periods – for example, during the prenatal period only (stillbirths), or during the neonatal period only (neonatal deaths).
Examples	WHO *Indicators to monitor maternal health goals* • **Perinatal mortality rate**
Useful references	DESIPA 1983 *Manual X: indirect techniques for demographic estimation*. New York: Population Division. United Nations. DESIPA 1988 *The United Nations software package for mortality measurement.* New York: Population Division, United Nations. DESIPA 1993 *Demographic yearbook.* Statistical Division. New York: United Nations. Hill, K. 1991 *Approaches to the measurement of childhood infant mortality: A comparative review*. Population Index 57(3), 368-382. UN *1996 Indicators of sustainable development. Framework and methodologies*. New York: United Nations. UNDP 1999 *Human development report*. New York: United Nations. WHO 1981 *Development of indicators for monitoring health for all by the year 2000,* p.29. Geneva, World Health Organization. WHO and UNICEF 1992 *Measurement of overall and cause specific mortality in infants and children*. Report of a joint WHO/UNICEF consultation, 15-17 December 1992. Unpublished document WHO/ESM/UNISEF/CONS/92.5. WHO 1993 *Coverage of maternity care. A tabulation of available information.* Geneva: World Health Organization. WHO 1994 *Global Health for All data base*. Geneva: World Health Organization. WHO 1996 *Catalogue of health indicators: a selection of health indicators recommended by WHO programmes*. Geneva: World Health Organization (under revision).