

Euro-Peristat list of indicators, updated 2012

Category	Core	Recommended	Further development
Neonatal health	<p>C1-Fetal mortality rate by gestational age, birth weight, plurality</p> <p>C2-Neonatal mortality rate by gestational age, birth weight, plurality</p> <p>C3-Infant mortality rate by gestational age, birth weight, plurality</p> <p>C4-Birth weight distribution by vital status, gestational age, plurality</p> <p>C5-Distribution of gestational age by vital status, plurality</p>	<p>R1-Prevalence of selected congenital anomalies</p> <p>R2-Distribution of APGAR score at 5 minutes</p> <p>R3-Fetal and neonatal deaths due to congenital anomalies</p> <p>R4-Prevalence of cerebral palsy</p>	<p>F1**-Severe neonatal morbidity among high risk infants</p> <p>F2**-Prevalence of neonatal encephalopathy</p> <p>F3**-Causes of fetal and neonatal death other than CA</p>
Maternal health	C6-Maternal mortality ratio by maternal age	<p>R5-Maternal mortality ratio by cause of death</p> <p>R6-Prevalence of severe maternal morbidity</p> <p>R7-Prevalence of tears to the perineum</p>	
Population characteristics or risk factors	<p>C7-Multiple birth rate by number of fetuses</p> <p>C8-Distribution of maternal age</p> <p>C9-Distribution of parity</p>	<p>R8-Percentage of women who smoke during pregnancy</p> <p>R9-Distribution of mothers' education</p> <p>R10-Distribution of households' occupational classification</p> <p>R11-Distribution of mothers' country of origin</p> <p>R12-Distribution of mothers' body mass index (BMI)</p>	
Health care services	C10-Mode of delivery by parity, plurality, presentation (of fetus), previous caesarean section	<p>R13-Percentage of all pregnancies following subfertility treatment</p> <p>R14-Distribution of timing of 1st natal visit</p> <p>R15-Distribution of births by mode of onset of labour</p> <p>R16-Distribution of place of birth by volume of deliveries</p> <p>R17-Percentage of very preterm infants delivered in units without a NICU</p> <p>R18-Episiotomy rate</p> <p>R19-Births without obstetric intervention</p> <p>R20-Percentage of infants breast-fed at birth</p>	<p>F4**-Neonatal screening policies</p> <p>F5**-Content of antenatal care</p>

Euro-Peristat Core Indicators

C1. Fetal mortality rate by gestational age, birth weight, plurality

Definition: The number of fetal deaths at or after 22 completed weeks of gestation in a given year per 1000 live and stillbirths in the same year calculated by gestational age, birth weight and plurality.

Fetal deaths are differentiated by whether they are spontaneous fetal deaths or result from a termination of pregnancy.

C2. Neonatal mortality rate by gestational age, birth weight, plurality

Definition: The number of neonatal deaths (day 0 through 27) after live birth in a given year per 1000 live births in the same year calculated by gestational age, birth weight and plurality.

This rate is presented for all births at or after 22 completed weeks of gestation.

This rate is sub-divided by timing of death into early neonatal deaths (0-6 days of life) and late neonatal deaths (7-27 days).

Cohort rates (deaths after live birth in the year, even if the deaths occur in the following year) are also collected by the Euro-Peristat project.

C3. Infant mortality rate by gestational age, birth weight, plurality

Definition: The number of deaths (day 0-364) after live birth in a given year per 1000 live births in the same year calculated by gestational age, birth weight and plurality.

This rate is presented for all births at or after 22 completed weeks of gestation.

Cohort rates (deaths after live birth in the year, even if the deaths occur in the following year) are also collected by the Euro-Peristat project

C4. Distribution of birth weight by vital status, gestational age, plurality

Definition: Number of births within each 500g weight interval expressed as a proportion of all live and stillbirths calculated by gestational age and vital status at birth for singletons and multiples.

C5. Distribution of gestational age by vital status and plurality

Definition: Number of live births and fetal deaths at each completed week of gestation (starting from 22 weeks) expressed as a proportion of all live and stillbirths for singletons and multiples.

Gestational age is defined as the best obstetrical estimate.

This distribution is presented, as follows:

22-36 weeks of gestation (preterm births)

37-41 weeks (term births)

41+ weeks (post-term births)

Preterm births can also be presented as:

22-27 weeks (extremely preterm)

28-31 weeks (very preterm)

32-36 weeks (moderately preterm)

C6. Maternal mortality ratio by maternal age

Definition: The number of maternal deaths (the death of a woman while pregnant or within 42 days of the termination of pregnancy, irrespective of the duration and site of the pregnancy, for

any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes) per 100 000 live births.

Euro-Peristat collects data on the maternal mortality ratio from both routine and enhanced systems in countries where the latter exist.

C7. Multiple maternity rate by number of fetuses

The number of women in a multiple gestation pregnancy at delivery as a proportion of all women delivering live or stillborn babies by number of fetuses

C8. Distribution of maternal age

Definition: Distribution of age in years at delivery for women delivering a live or stillbirth.

Recommended presentation, as follows: <15, 15-17, 18-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50+

C9. Distribution of parity

Definition: Distribution of parity (number of previous live or stillbirths) of women delivering a live or stillbirth.

C10. Mode of delivery by parity, plurality, presentation of the fetus, previous caesarean section and gestational age

Definition: For a population of women and year: the number of births associated with each of the following modes:

- Vaginal, non instrumental
- Vaginal: forceps
- Vaginal: ventouse
- Vaginal (other, Thierry's spatula, etc..)
- Caesarean: before or at onset of labour/elective
- Caesarean: during labour/emergency

as a proportion of all still and live births.

Computed by parity, plurality, presentation and previous caesarean section and gestational age (22-27, 28-31, 32-36, 37, 38, 39, 40, 41, 42+)

Euro-Peristat Recommended Indicators

R1. Prevalence of selected congenital anomalies

Definition: The number of neural tube defects, oral clefts, and Down's syndrome as a proportion of all live births, fetal deaths and induced abortions collected in the following categories:

Anencephaly and similar anomalies (ICD10-Q00)

Spina bifida (ICD10-Q05)

All congenital anomalies of the central nervous system (ICD10-Q00-Q07)

Down's syndrome (ICD10-Q90)

Cleft lip (ICD10-Q36)

Cleft palate with cleft lip (ICD10-Q37)

Cleft palate (without cleft lip) (ICD10-Q35)

Data are collected for three years.

R2. Distribution of APGAR score at 5 minutes

Definition: Distribution of APGAR score at 5 minutes (0-10) for live births

R3. Perinatal deaths attributed to congenital anomalies subdivided by gestational age and plurality

The number of deaths in the fetal and neonatal period, subdivided into those attributed to congenital anomalies and those attributed to remaining causes.

R4. Prevalence of Cerebral Palsy

For this indicator, we use the SCPE (Surveillance of Cerebral Palsy in Europe) definition. Data on this indicator are collected and provided by the SCPE network. (http://www-rheop.ujf-grenoble.fr/scpe2/site_scpe/index.php)

R5. Maternal mortality ratio by cause of death

Definition: Number of maternal deaths (during pregnancy or within 42 days following the end of pregnancy) per 100,000 live births by the following causes:

Cause of death	ICD-10 codes
Ectopic pregnancy	O00
Pregnancy with abortive outcome (excluding ectopic)	O01 - O08
Hypertensive disorders	O10 - O16
Haemorrhage	O20 O44.1 O45 O46 O67 O72
Chorioamnionitis/sepsis	O75.2 O75.3 O85 O86 O41.1
Other thromboembolic causes	O22.2 O22.3 O22.5 O22.8 O22.9, O87.0 O87.1 O87.3 O87.8 O87.9 O88 (excl. O88.1)
Amniotic fluid embolism	O88.1
Complications of anaesthesia	O29 O74 O89

Uterine rupture	O71.0, O71.2
Other direct causes	All direct causes in O chapter that are not listed above
Indirect causes: diseases of the circulatory system	O99.4
Indirect causes: other	O98, O99.1-3, 5-9
unspecified obstetric cause/Unknown	O95

R6. Prevalence of severe maternal morbidity

Definition: Severe Maternal Morbidity: Severe acute morbidity resulting during pregnancy, delivery or the puerperium period (<42 days) as a proportion of all women delivering live or stillborn births:

Eclampsia (includes convulsion following specified or unspecified hypertensive disorders (that are not due to unknown epilepsy) during pregnancy, delivery or the puerperium. Corresponds to ICD-10 code O150)

Hysterectomy (surgical remove of the uterus (partial or total, body and/or cervix) for stopping the untreatable post partum haemorrhage) or embolisation (the process by which a blood vessel is obstructed by the lodgement of a material mass (or an embolus) to stop severe obstetric haemorrhage).

Blood transfusion (all acts or processes of transferring blood into the vein, including transfusion of red blood cells, platelets (thrombocytes) and fresh frozen plasma). Collected by units of blood (3 units or more, 5 units or more, other amount, no units specified)

ICU >24 hours (admission during pregnancy, delivery or the puerperium to any facility or unit providing intensive or acute care or resuscitation-whether inside or outside of the maternity unit- for greater than 24 hours)

R7. Prevalence of tears to the perineum

Definition: the number of women who had a first-, second-, third-, or fourth-degree tear of the perineum expressed as a proportion of all women who had a vaginal delivery. Presented for all vaginal deliveries and then for non-instrumental and instrumental separately.

Categories as follows (ICD10)

1st degree tear (ICD O70.0) involves the fourchette, perineal skin and vaginal membrane.

2nd degree tear (ICD O70.1) includes the skin and mucous membrane, and the fascia and muscles of the perineal body.

3rd degree tear (ICD O70.2) extends through skin, mucous membrane and perineal body and involves the muscle of the anal sphincter.

4th degree tear (ICD O70.3) extends through the rectal mucosa to expose the lumen of the rectum.

R8. Percentage of women who smoke during pregnancy

Definition: The number of women who smoke during the third trimester of pregnancy expressed as a proportion of all women delivering live or stillborn babies.

When data are not available for the third trimester of pregnancy, data are requested for another time point during pregnancy.

R9. Distribution of mother's education

Definition: The distribution of education level of women delivering live or stillborn babies, expressed as highest level of education of the mother.

Data is collected using most detailed educational groupings in national systems and recoded by Euro-Peristat using the international standard classification of education (ISCED - UNESCO, 1997)

- Primary not complete or none
- Primary complete
- Lower secondary (up to 3 or 4 years)
- (Upper) secondary (up to 6 or 7 years)
- Post secondary non tertiary (6 months to 2 years)
- First stage of tertiary education (Bachelor)
- Second stage of tertiary education (Master, doctorate or more)
- Unknown

R10. Distribution of household occupation

Definition: The distribution of the mother's and father's occupation for mothers and fathers of live or stillborn babies using the International Standard Classification of Occupations (ISCO-08) major groups:

- 1-Managers
- 2-Professionals
- 3-Technicians and associate professionals
- 4-Clerical support workers
- 5-Service and sales workers
- 6-Skilled agricultural, forestry and fishery workers
- 7-Craft and related trades workers
- 8-Plant and machine operators, and assemblers
- 9-Elementary occupations
- 0-Armed forces occupations
- 99 – no profession
- 88 – student

<http://www.ilo.org/public/english/bureau/stat/isco/>

If countries cannot use this classification, data are provided using local classifications used to report on occupation in your system.

R11. Distribution of mother's country of origin

Definition: Distribution of the countries of birth of women delivering live or stillborn babies. These data will be presented by:

1. Geographic regions (as per UN World Regions^a and components with Europe further subdivided into EU27^b and non-EU27^b)
2. Regions grouped by income level (as per World Bank^c or UNDP^d, using regions defined by income distribution rather than solely gross national income)
 - a. United Nations: <http://www.un.org/depts/dhl/maplib/worldregions.htm>
 - b. European Union: http://europa.eu/abc/european_countries/index_en.htm
 - c. <http://go.worldbank.org/D7SN0B8YU0>.
 - d. United Nations Development Programme.

R12. Distribution of mothers' pre-pregnancy body mass index (BMI)

Definition: Distribution of pre-pregnancy body mass index for women delivering live or stillborn babies before pregnancy or at the first antenatal visit. BMI is defined as the pre-pregnancy weight in kilograms divided by the square of the height in meters (kg/m²) and is classified as follows:

Underweight <18.50

Normal range	18.50-24.99
Overweight	25.00-29.99
Obese	30.00
- Obese class I	30.00-34.99
- Obese class II	35.00-39.99
- Obese class III	40.00

R13. Percentage of births following subfertility treatment

Definition: The number of women delivering live or stillborn babies after the following fertility treatments divided by the total number of women delivering live or stillborn babies.

Induction of Ovulation only

IntraUterine Insemination (IUI) with or without OI

InVitro Fertilisation (IVF), IntraCytoplasmatic Sperm Injection (ICSI), InVitro Maturation (IVM); including frozen embryo transfers

Unknown

R14. Distribution of timing of first antenatal visit

Definition: Distribution of timing of first antenatal visit regardless of provider by trimester of pregnancy for all women delivering live or stillborn babies. Trimesters are defined as follows (by completed weeks of gestation):

1st trimester = < 15 weeks

2nd trimester = 15 – 27 weeks

3rd trimester = 28 weeks or more

R15. Distribution of births by mode of onset of labour by singleton/twin and gestational age

Definition: The number of deliveries associated with each of the following modes of labour onset, as a proportion of deliveries resulting in a live or stillbirth:

- Spontaneous onset
- Caesarean section prior to the onset of labour
- Labour induction (initiation of uterine contractions) by medical or surgical means prior to the onset of labour.

For all births and by gestational age, using the following groups:

22-27, 28-31, 32-36, 37, 38, 39, 40, 41, 42+

R16. Distribution of place of birth

Definition: Number of births occurring at home or in maternity units defined by the number of annual births, with the following groups: home, <300, 300-499, 500-999, 1000-1499, 1500-1999, 2000-2999, 3000-3999, 4000-4999, 5000+)

R17. Percentage of infants breastfed at birth?

Definition: The number of babies who are partially breastfed (infant receives breast milk and the infant is allowed any food or liquid including non-human milk) and the number who are exclusively breastfed (infant receives breast milk and is allowed to receive drops and syrups) throughout the first 48 hrs of age as a proportion of all newborn babies. (Definitions from WHO Indicators for Assessing Breastfeeding Practices. Report from meeting 11-12 June 1991. Geneva, 1991.)

R18. Episiotomy rate

Definition: The number of women who had an episiotomy expressed as a proportion of all women who had a vaginal delivery. Presented for all vaginal deliveries and then for non-instrumental and instrumental separately.

R19. Births without obstetric intervention

Definition: Number of deliveries without selected obstetric interventions as a proportion of all deliveries resulting in a live birth or stillbirth

Births without obstetric intervention are defined as births to women whose labour starts spontaneously, progresses spontaneously without drugs, and who give birth spontaneously; To compute this indicators, we collect information on women who experience any one or more of the following:

- induction of labour (with prostaglandins, oxytocic's or ARM),
- epidural or spinal or general anaesthetic,
- forceps or ventouse,
- caesarean section
- episiotomy

R20. Percentage of very preterm babies delivered in units without a NICU

Definition: The percentage of preterm live and stillbirths less than 32 completed weeks of gestation that are born in a maternity unit without an on-site neonatal intensive care unit. The place of birth of very preterm birth should be presented by level of neonatal intensive care unit using local official or, if no official definitions exist, unofficial definitions with the units without a NICU highlighted.

Further development indicators**Indicator****F1**. Severe neonatal morbidity among babies at high risk**

definition to be developed

F2. Prevalence of neonatal encephalopathy**

definition to be developed

F3. Causes of fetal and neonatal death other than CA**

Definition to be developed

F4. Neonatal screening policies**

definition to be developed

F5. Content of antenatal care**

definition to be developed