Indicator n°1: Trend in the birth prevalence of pre- or perinatal CP per 1,000 live births

The time trend of the overall prevalence of CP per 1,000 live births is calculated by pooling the data from the SCPE registries. This indicator relates to pre- or perinatal cases of CP (cases of CP with a known post-neonatal cause are excluded).

It is calculated on the last 10 birth cohorts available in the JRC-SCPE Central database, and the following selection criteria are being used:

Exclusion of registries with less than 3,000 LB per year.

Exclusion based on place of birth/place of residence at registration:

- C01, C02: exclusion of cases not residing in the area covered by the registry at time of registration (exclusion if REGIST_RESID ≠ 1)[1].
- Other registries: exclusion of cases born outside the area covered by the registry and unknown area of residence at birth (exclusion if BIRTH_RESID ≠ 1).

Exclusion of CP of post-neonatal origin (exclusion if POSTNEON = 1).

Inclusion of registries with at least 5 birth-cohorts available over the study period, with both CP cases (numerator) and live births (denominator) available.

To smooth out short-term fluctuations, prevalence is displayed using a 3-year moving average. For year i (central value), an unweighted mean of prevalence rates for years $i-1$ to year $i+1$ is calculated. For the last year of the study period, the mean takes only two years into account: i to year $i-1$. A line graph is proposed with all central values on the x-axis.

The number of registries considered in the analysis potentially differs across the period.

$P_{i.}$	the mean birth prevalence of pre/perinatal CP for birth-cohort i per 1,000 livebirths
n_{ik}	the number of pre/perinatal CP cases for birth-cohort i in registry k
LB_{ik}	the number of livebirths for birth-cohort i in registry k,

registries being numerated $k = 1, \ldots, K$.

The birth prevalence rate of pre/perinatal CP for birth-cohort i is estimated as follows:

$$P_{i.} = \frac{\sum_{k=1}^{K} n_{ik}}{\sum_{k=1}^{K} LB_{ik}} \; x \; 1{,}000$$

[1] Please refer to the SCPE Guideline for the Collection and Submission of Data for a definition of the variables collected in the JRC-SCPE Central database.