

Indicator n°4: Occurrence of severe associated impairments, by GMFCS level

Walking ability is defined according to the levels of the [Gross Motor Function Classification System](#) (GMFCS, a classification of the movement ability of children with CP), classifying the children into 3 categories as follows: GMFCS levels I-II (independent walker), GMFCS level III (walker with aid), and GMFCS levels IV-V (wheelchair).

The association of the gross motor function disability with three severe impairments is being looked at in this indicator, to provide information on the level of disability among CP cases. The severe impairments considered are:

- Severe intellectual impairment: intellectual quotient (IQ) < 50
- Active epilepsy: need for an active treatment for epilepsy
- Severe visual impairment: blindness or no useful vision.

This indicator relates to pre- or perinatal cases of CP (cases of CP with a known post-neonatal cause are excluded). It provides the average distribution of severe impairments by GMFCS using data from the SCPE registries.

It is calculated on the last 3 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)⁴.
- 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).

No more than 30% missing data by registry during the entire study period:

(exclusion if more than 30% of missing GMFCS)

(exclusion if more than 30% of missing INTEL_IMP)

(exclusion if more than 30% of missing EPILESY and EPIL_ACT)

(exclusion if more than 30% of missing VI_SEVER)

⁴ 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.