



POPULATION INCIDENCE OF CONGENITAL MICROCEPHALY IN THE CZECH REPUBLIC

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Diagnose

ICD-10 Q00 Microcephaly

Definition:

- <u>EUROCAT</u>: Microcephaly is a reduction in the size of the brain with a skull circumference more than 3 SD below the mean for sex, age and ethnic origin.
- WHO: Neonates with a head circumference more than 2 SD below the mean.
- Ministry of Health of the Czech Republic: Microcephaly is defined as the value of the fronto-occipital circuit under the 3rd percentile.

Data has been gathered between 1994 and 2015 by

- Neonates National Registry of Congenital Anomalies of the Czech Republic Institute of Health Information and Statictics of the Czech Republic
- Prenatal diagnosis Society of Medical Genetics And Genomics of the Czech Medical Association

For 10 000 neonates Neonate Prenatal diagnosis 1,80 1,60 1,40 1,20 1,00 0,80 0,60 0,40 1,90

Discussion

The frequency of microcephaly in the Czech Republic is low.

Most of the cases are diagnosed in the newborns.

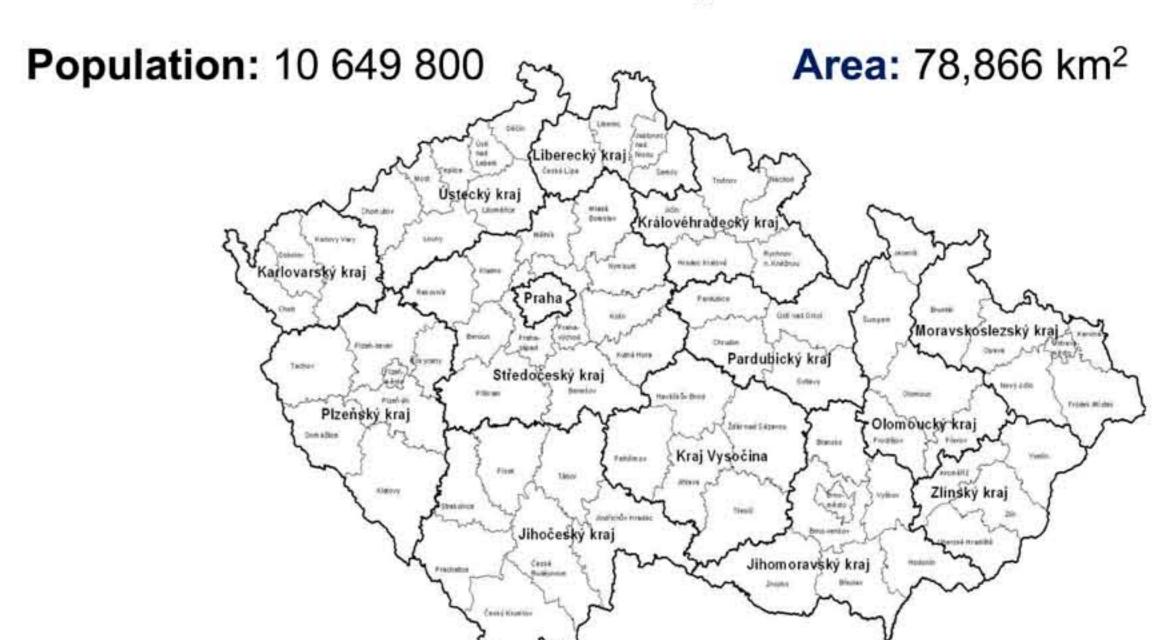
Relative numbers also fluctuate in the Czech Republic:

- the lowest 0.33 in 2008
- the higest 1.72 in 2002

Frequencies **vary** widely in international comparison because different:

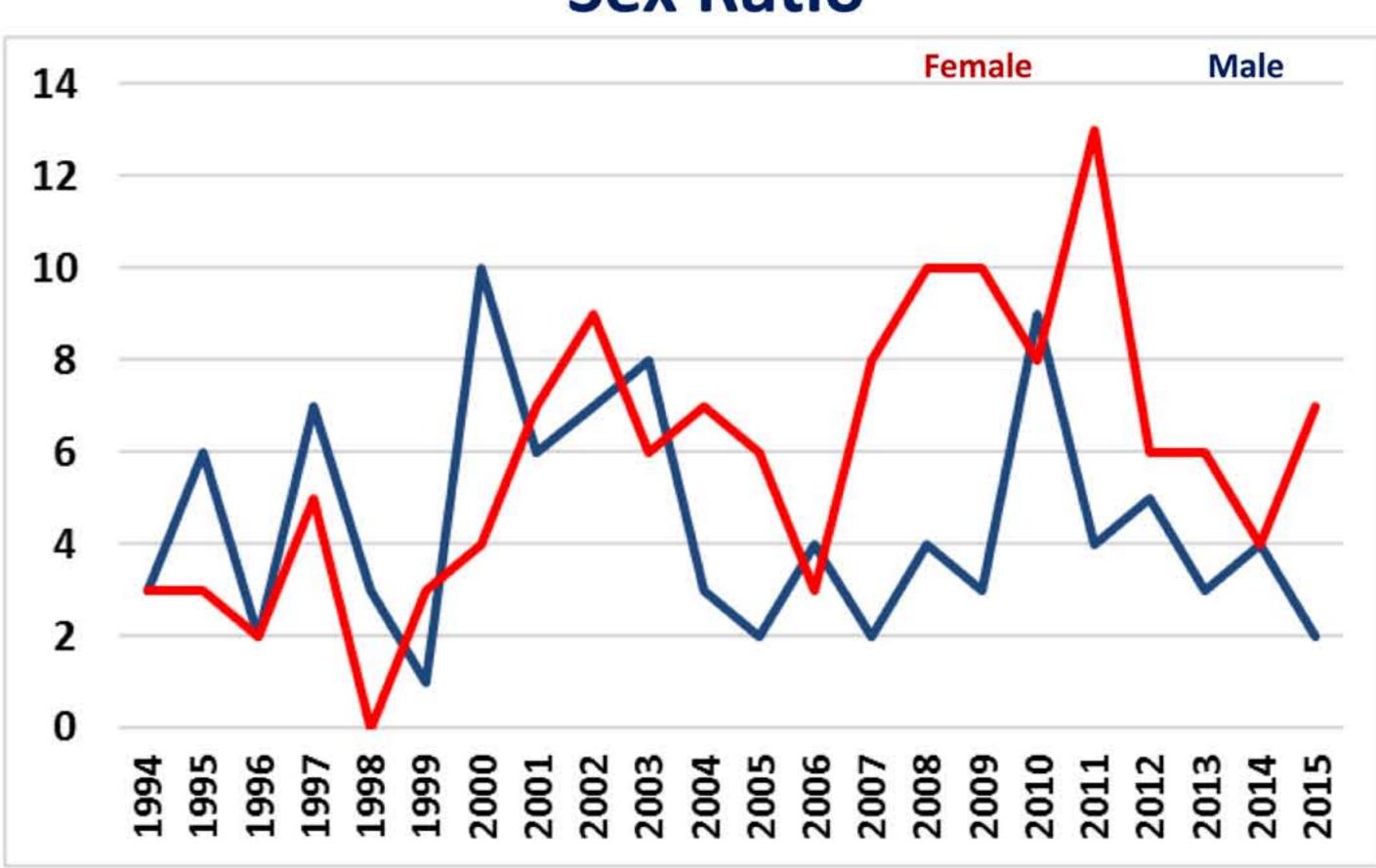
- definitions of microcephaly;
- methodics of anomaly surveillance;
- coverage of various registries.

Czech Republic



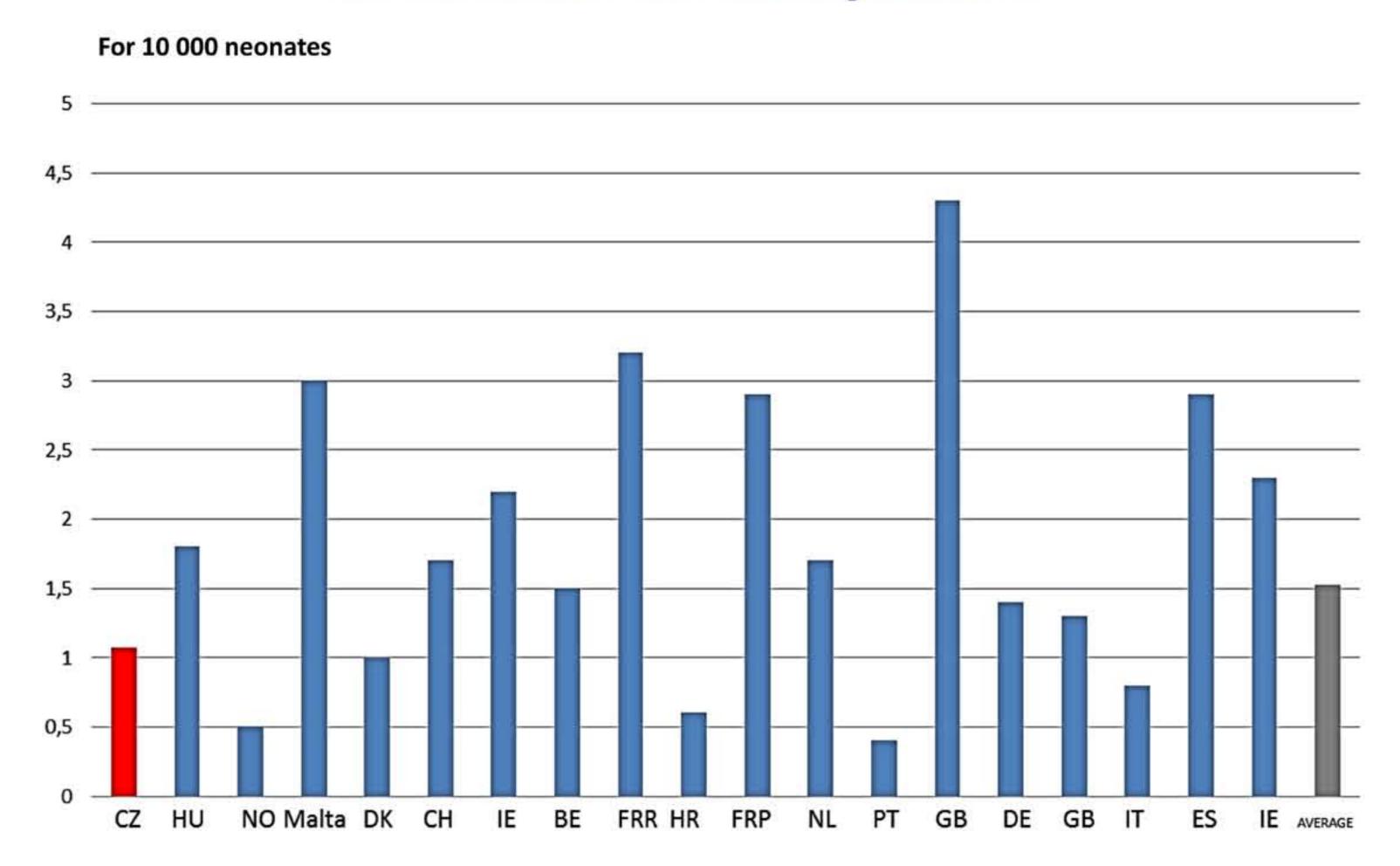
14th largest country in Europe

Sex Ratio



Female to male ratio in Czech Republic is 1.32:1.

International Comparison



MORRIS, Joan K, Judith RANKIN, Ester GARNE, et al. Prevalence of microcephaly in Europe: population based study. *BMJ* [online]. [cit. 2019-06-10]. DOI: 10.1136/bmj.i4721. ISSN 1756-1833.

The average incidence ratio between Czech Republic and European Union is 1.07:1.53.

















