

National Registry of Congenital Anomalies of the Czech Republic



PRENATAL DIAGNOSTICS OF CHROMOSOMAL ABERRATIONS IN THE CZECH REPUBLIC: HOW THE INDICATIONS FOR INVASIVE DIAGNOSTICS ARE CHANGING OVER TIME.

<u>Vladimír Gregor^{1,2}</u>, Antonín Šípek^{1,2,3}, Antonín Šípek Jr^{1,4}, Jiří Horáček^{1,5} Jan Klaschka^{6,7}, Marek Malý^{6,8}

¹ Department of Medical Genetics, Thomayer Hospital, Prague, Czech Republic

Czech Republic - Infobox 13 regions and the capital Prague; 76 districts in total Population: 10 553 843 Area: 78,866 km²

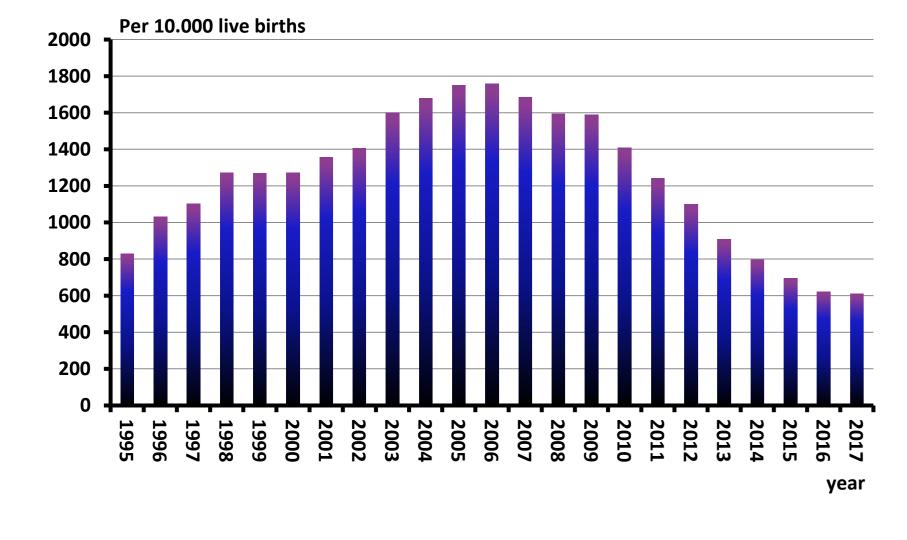
Surveillance - Infobox

- 50+ years of history; the registry was founded in 1964.
- Population-wide coverage; reporting is compulsory.
- Data are stored in the State Institute of Health Information and Statistics (ÚZIS ČR)
- Multiple sources (geneticists, neonatologists, paediatricians, other specialists).
- Registry includes cases diagnosed in livebirths, stillbirths and prenatally diagnosed cases.
- Termination of pregnancy legal (up to 24th GW)
- Main classification system: ICD-10 (national)

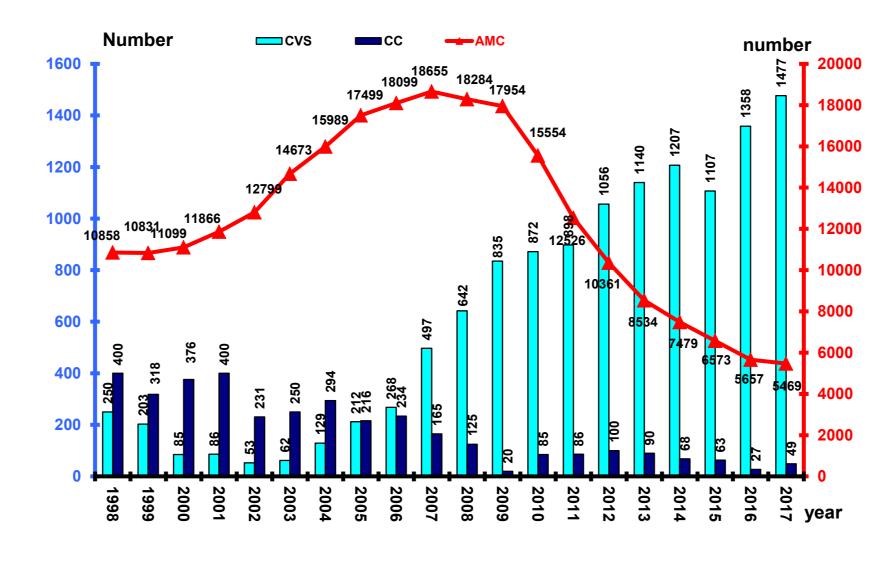
Data sources

- National Registry of Congenital Anomalies
- National Registry of Newborns
- Society of Medical Genetics and Genomics

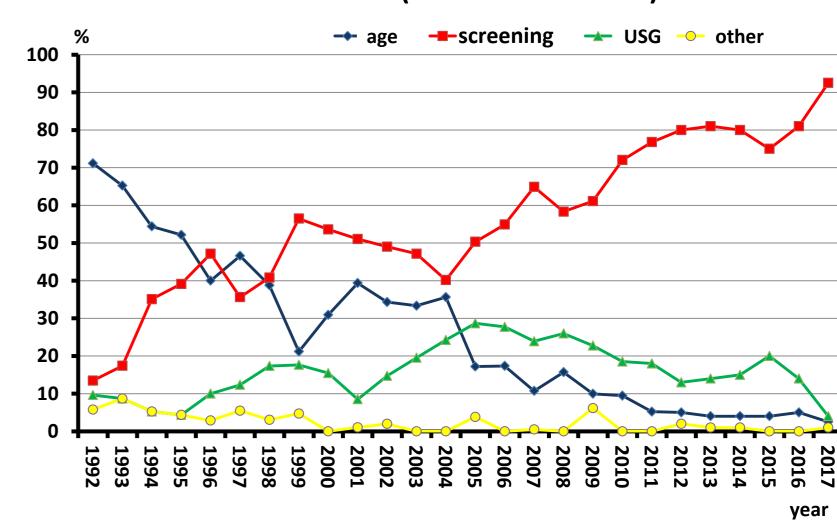
Invasive prenatal diagnostics in the Czech Republic: 1995-2017 (relative numbers)



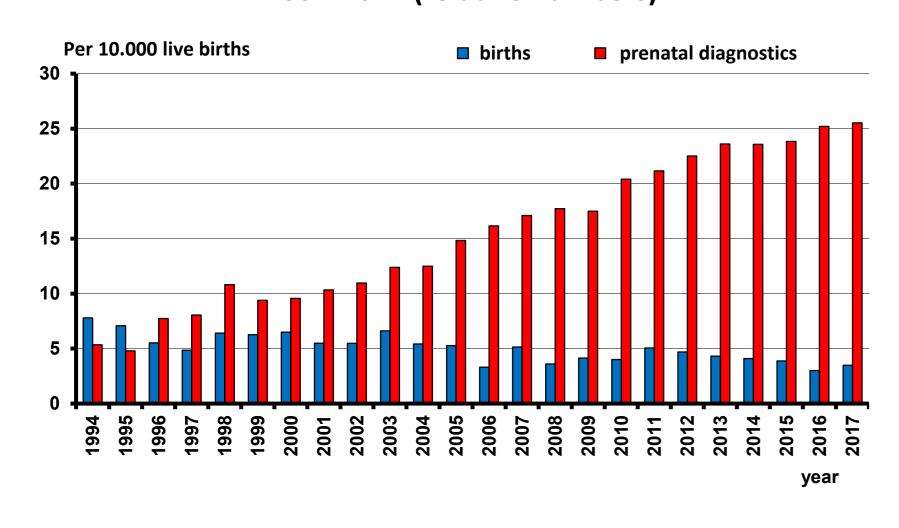
Invasive prenatal diagnostics in the Czech Republic: 1998-2017 (absolute numbers)



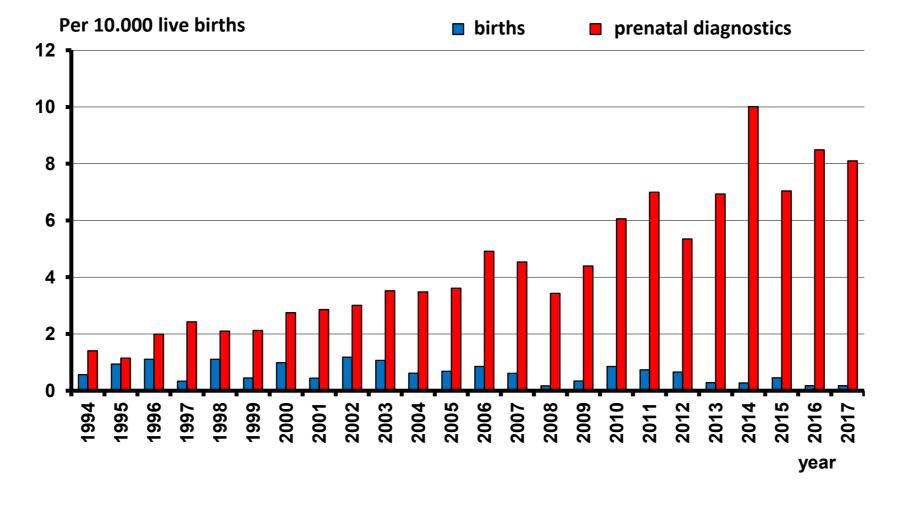
Invasive prenatal diagnostics in the Czech Republic: 1998-2017 (absolute numbers)



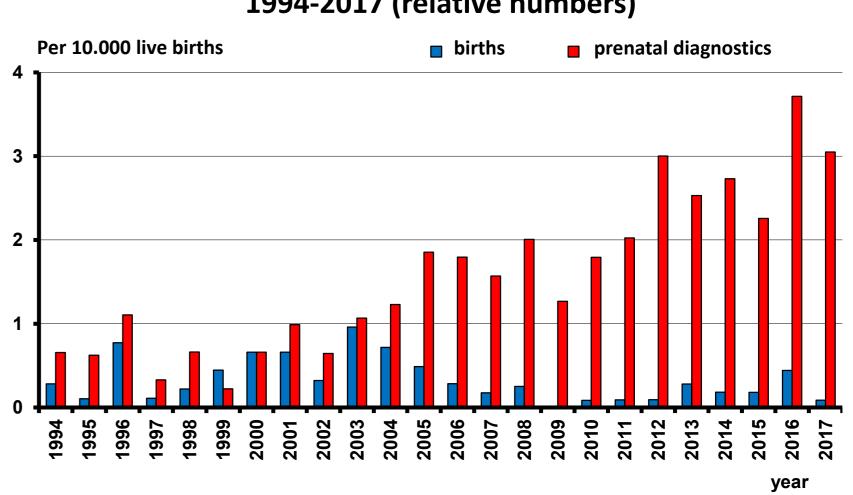
Down syndrome in the Czech Republic: 1994-2017 (relative numbers)



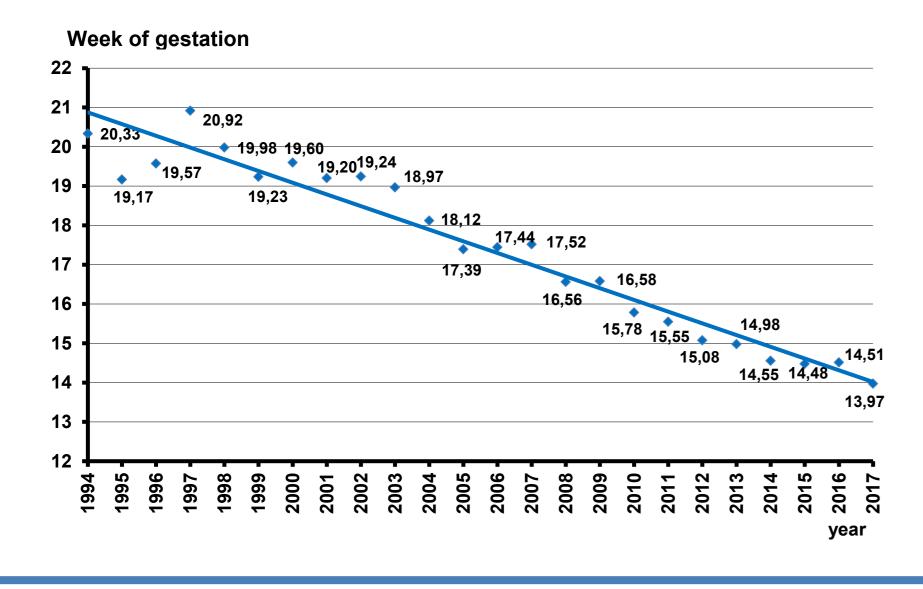
Edwards syndrome in the Czech Republic: 1994-2017 (relative numbers)



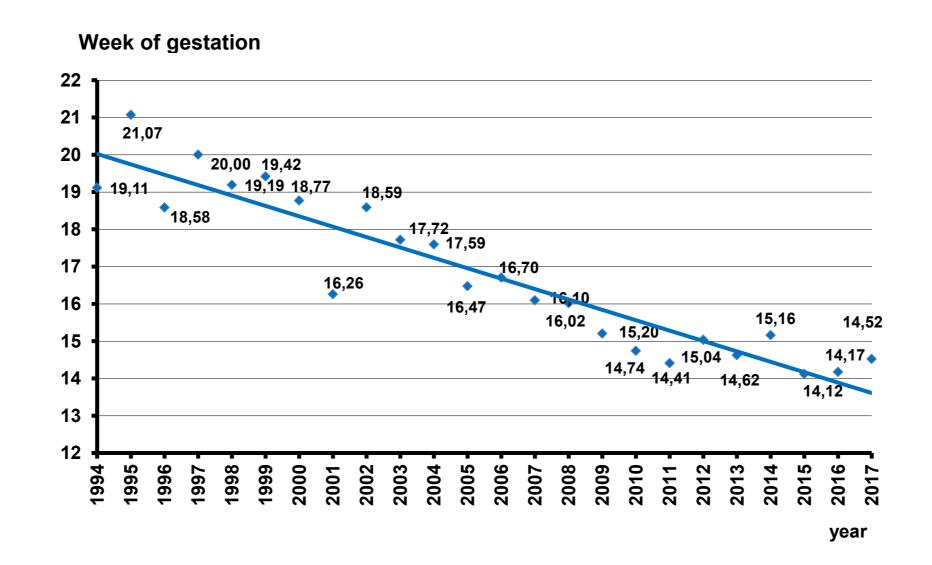
Patau syndrome in the Czech Republic: 1994-2017 (relative numbers)



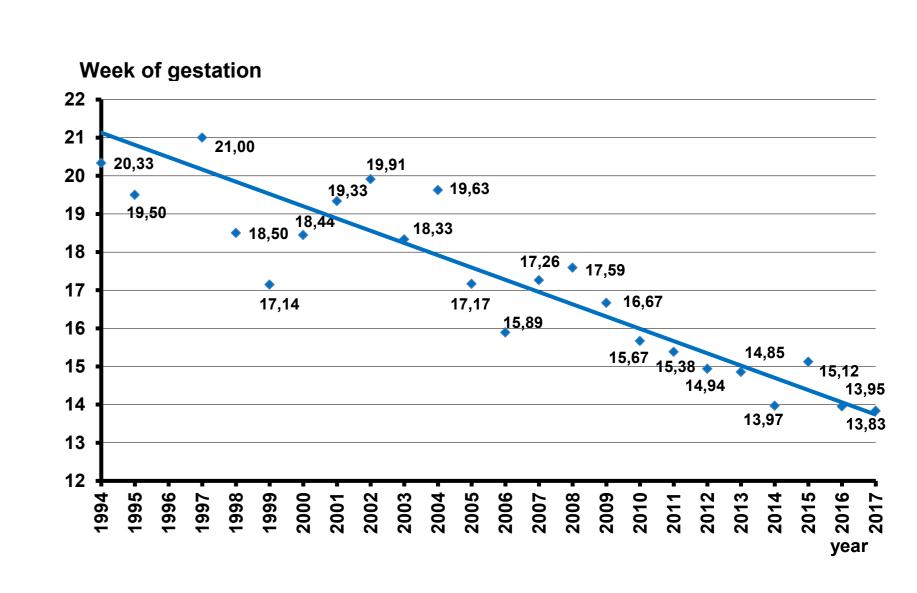
Down syndrome in the Czech Republic: 1994-2017 (average GW at the time of diagnostics)



Edwards syndrome in the Czech Republic: 1994-2017 (average GW at the time of diagnostics)



Patau syndrome in the Czech Republic: 1994-2017 (average GW at the time of diagnostics)





Contact: vladimir.gregor@ftn.cz

















² Department of Medical Genetics, Pronatal Sanatorium, Prague, Czech Republic

³ Institute of Biology and Medical Genetics, 3rd Faculty of Medicine, Charles University, Prague, Czech Republic

⁴ Institute of Medical Biology and Genetics, 1st Faculty of Medicine, Charles University and General University Hospital, Prague, Czech Republic

⁵ Gennet, Centre for Foetal Medicine and Reproductive Genetics, Prague, Czech Republic

⁶ Institute of Computer Science of the Czech Academy of Sciences, Prague, Czech Republic

⁷ Institute of Biophysics and Informatics, First Faculty of Medicine, Charles University, Prague, Czech Republic

⁸ National Institute of Public Health, Prague, Czech Republic