

## PRENATAL DIAGNOSIS OF ANENCEPHALY IN THE CZECH REPUBLIC: 20 YEARS OF POPULATION-WIDE SURVEILLANCE

**Antonín Šípek<sup>1,2,3</sup>, Vladimír Gregor<sup>1,2</sup>, Jitka Jírová<sup>4</sup>, Antonín Šípek Jr<sup>1,5</sup>, Marek Malý<sup>6,7</sup>, Jan Klaschka<sup>6,8</sup>**

<sup>1</sup>Department of Medical Genetics, Thomayer Hospital, Prague, Czech Republic,

<sup>2</sup>Department of Medical Genetics, Pronatal Sanatorium, Prague, Czech Republic,

<sup>3</sup>Institute of Medical Genetics, Third Faculty of Medicine, Charles University, Prague, Czech Republic,

<sup>4</sup>Institute of Health Information and Statistics of the Czech Republic, Prague, Czech Republic,

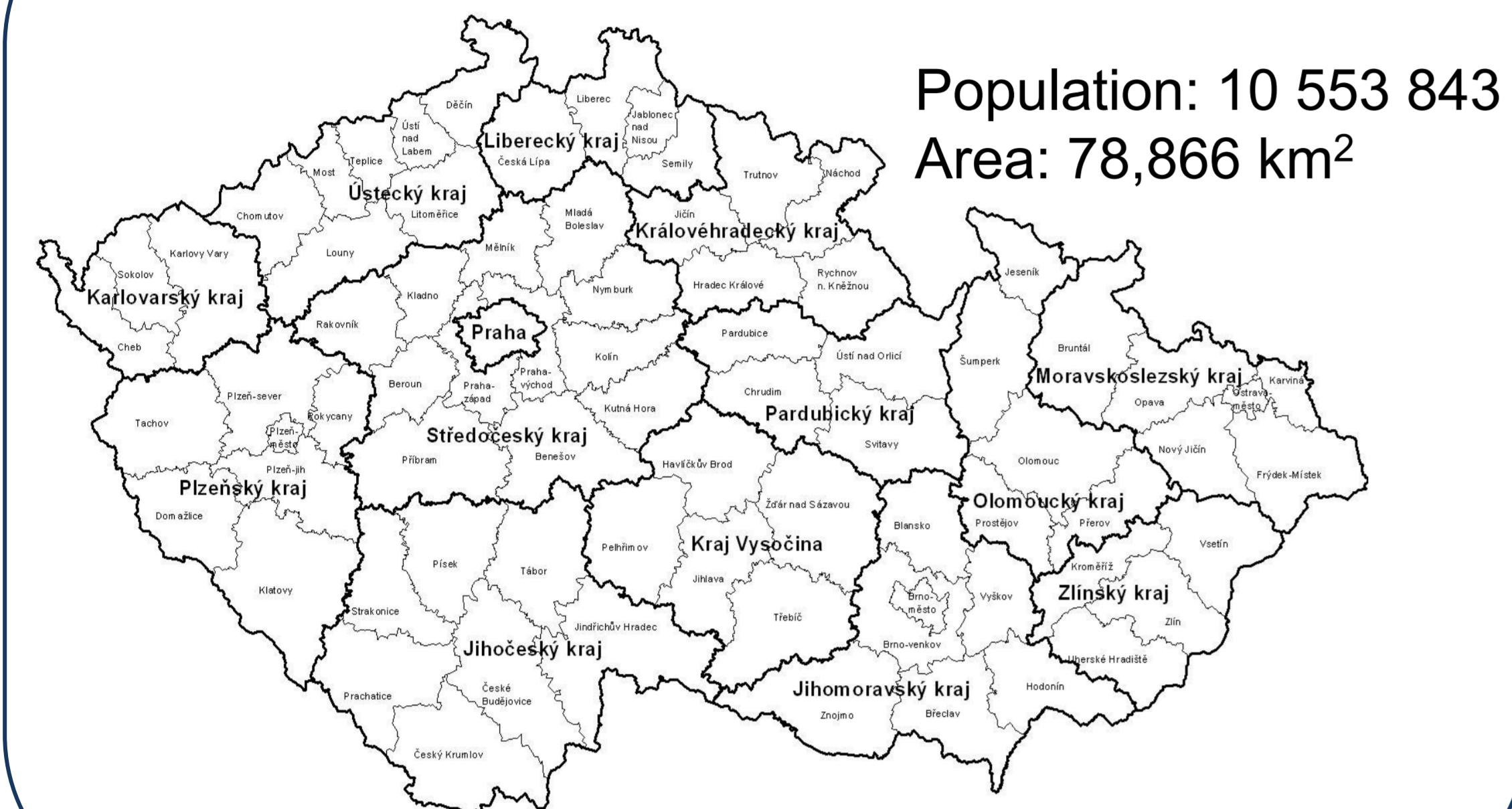
<sup>5</sup>Institute of Biology and Medical Genetics, First Faculty of Medicine, Charles University, Prague, Czech Republic,

<sup>6</sup>Institute of Computer Science of the Czech Academy of Sciences, Prague, Czech Republic,

<sup>7</sup>National Institute of Public Health, Prague, Czech Republic,

<sup>8</sup>Institute of Biophysics and Informatics, First Faculty of Medicine, Charles University, Prague, Czech Republic.

### Czech Republic - Infobox



### 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)
- Folic acid usage: unavailable

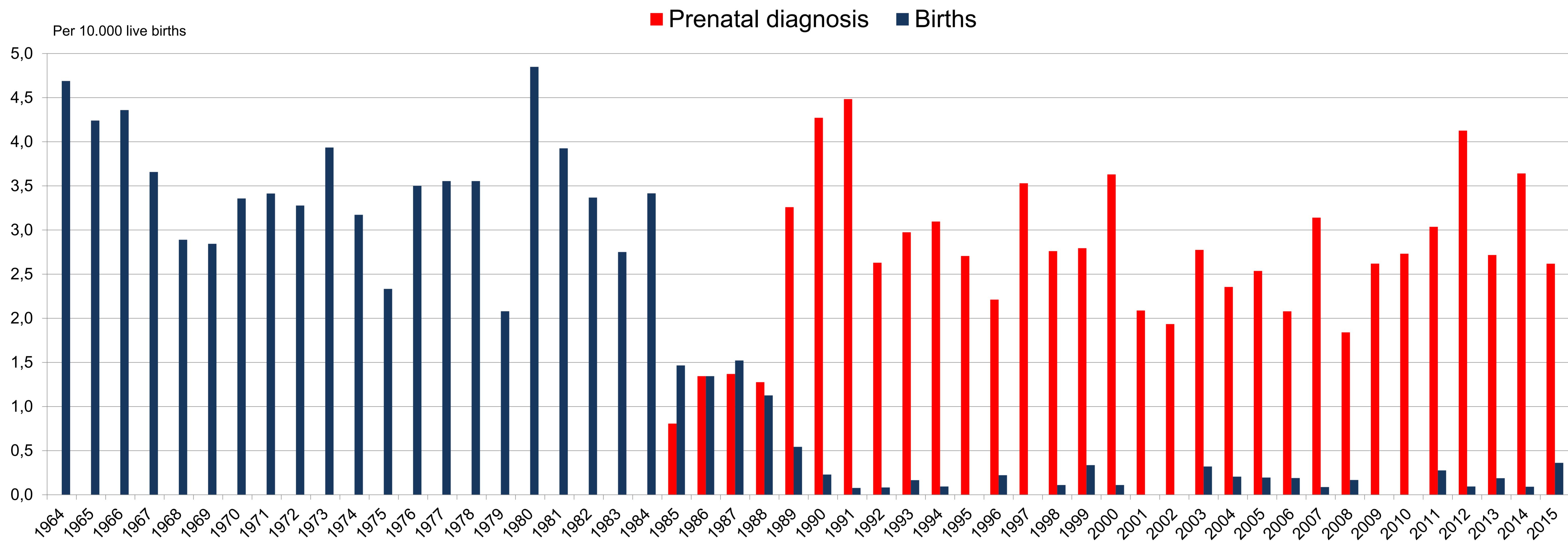
### Anencephaly - Infobox

- Significant absence of brain, skull and scalp
- Fatal anomaly, Neural Tube Defect
- Etiology: Heterogeneous/Multifactorial
- ICD-10: Q00.0
- ICD-9: 740.0
- OMIM: 206500
- ORPHANET: 1048



Image source: WHO/CDC/CBDSR. Birth defects surveillance: Atlas of selected congenital anomalies. Geneva: World Health Organization; 2014.

### Anencephaly – Czech Republic (1964-2015)



### Anencephaly – Czech Republic (1996-2015)

