

EDÍCIA ZDRAVOTNÍCKA ŠTATISTIKA

# Vrodené chyby v SR 2007

Congenital defects  
in SR 2007

Ročník 2008  
ZŠ-3/2008

## Content

|  |    |
|--|----|
| Introduction .....   | 9  |
| 1. Part  |    |
| Liveborn children with congenital malformation on 10 000<br>live-born children (graph) .....   | 13 |
| Liveborn children with congenital malformation on 10 000 live-born<br>children by territory of mother permanent residence (graph) .....  | 13 |
| Development of number of live-born children with a congenital defect<br>on 10 000 of live-born children according to a permanent residence<br>of the mother in years 2000 – 2007 .....                               | 14 |
| Reported congenital defects according to territories of permanent residence<br>of the mother .....   | 16 |
| Live-born children with a congenital malformation according<br>to permanent residence of the mother (graph) .....  | 18 |
| Number of reported congenital defects according to sex and quantity<br>of a pregnancy of the mother .....  | 18 |
| Number of born children with a congenital defect according to birth weight<br>and territorial division of permanent residence of the mother .....  | 19 |
| Live-born children with a congenital malformation on 10 000 live-born<br>children according to age of the mother (graph) .....   | 20 |
| Number of legally inductings of a pregnancy from a reason of prenatally<br>detected congenital defect of foetus according to weight of foetus<br>and territorial division of permanent residence of the mother ..... | 20 |
| Number of live-born children with a congenital defect according<br>to birth weight and birth length .....  | 21 |
| Reported congenital defects according to age of the mother and father .....  | 22 |
| Number of live-born children with a congenital defect according<br>to age of the mother and father .....   | 22 |
| Average of live-born children with a congenital malformation on 10 000<br>live-born children in period 2000 – 2007 (map) .....   | 23 |
| Reported congenital defects according to age of the mother<br>and territorial division of permanent residence of the mother .....  | 24 |
| Number of live-born children with a congenital defect according<br>to age of the mother and territorial division of permanent residence<br>of the mother .....   | 26 |
| Live-born children with a congenital defect according to age of the mother<br>and territorial division of permanent residence of the mother on 10 000<br>of live-born children .....                                 | 28 |
| Reported congenital defects according to marital status of the mother .....  | 30 |
| Number of live-born children with a congenital defect according to weight<br>and week of pregnancy .....   | 30 |

|   |    |
|---|----|
| Structure of congenital malformations by live-born boys (graph) .....   | 31 |
| Structure of congenital malformations by live-born girls (graph) .....  | 31 |
| Number of reported congenital defects according to diagnoses<br>of congenital defects and sex .....   | 32 |
| Reported congenital defects according to diagnoses of congenital defects<br>and birth weight (weight of foetus) .....   | 34 |
| Number of live-born children with a congenital defect according to diagnoses<br>of congenital defects and birth weight .....  | 36 |
| Reported congenital defects according to diagnoses of congenital defects<br>and age of the mother .....   | 38 |
| Number of live-born children with a congenital defect according<br>to diagnoses of congenital defects and age of the mother .....                                       | 40 |
| Live-born children with a congenital defect on 10 000 of live-borned children<br>according to diagnoses of congenital defects and age of the mother .....               | 42 |
| Incidence of congenital disorders at live-born children .....   | 44 |
| Reported congenital defects according to selected diagnoses of congenital defects<br>and a district of a permanent residence of the mother .....                        | 46 |
| Reported live-born children with a congenital defect on 10 000 of live-borns<br>according to diagnoses .....  | 52 |
| Proportion of most frequent diagnoses of congenital disorders<br>of live-born in SR (graph) .....   | 54 |
| Most numerous diagnoses of congenital disorders at live-borns<br>by counties of SR (graph) .....  | 54 |
| Number of born children with a congenital defect according to a prenatally<br>detected congenital defect and selected diagnoses .....                                   | 55 |
| <b>2. Part</b>  |    |
| Reported incidence of congenital heart diseases in period of 1998 – 2002 total .....  | 59 |
| Reported incidence of congenital heart disorders period of 2003 – 2007 total .....  | 59 |
| Reported incidence of congenital heart disorders with diagnosis Q20 – Q28 .....   | 60 |
| Infant mortality of children with congenital heart disorder .....   | 61 |
| Congenital heart disorders – incidence in period of 1992 - 2007 (graph) .....   | 62 |
| Proportion of mortality on congenital heart disorders with diagnosis Q20 – Q28<br>and causes related to congenital heart disorders .....                                | 63 |
| Evolution of infant mortality on congenital heart disorders<br>with diagnosis Q20 – Q28 (graph) .....   | 64 |
| Reported congenital heart disorders diagnosed within the first year<br>by counties in 1998 – 2007 .....   | 64 |
| Incidence of infants on congenital heart disorders in 1998 – 2007 (graph) .....   | 65 |
| Prevalence of congenital heart disorders in SR on 31. 12. 2007<br>(number of surviving with congenital heart disorders in age group<br>of 0 – 15 on 31. 12. 2007) ..... | 65 |
| Verbal expression of diagnoses (ICD-10) .....   | 66 |
| Codes of regions SR .....   | 69 |
| Districts of Slovak Republic (map) .....  | 70 |

## Introduction

Hereby we submit the publication *Congenital Disorders in SR 2007*, which is published in edition of *Health Statistics*. This publication was released for the first time in 1965 in cooperation with IHS Prague, which covered federal data divided in Czech and Slovak national data up to year 1992.

The basis for processing of statistical data contained in the first part of the publication is the Report on Congenital Disorder. The second part presents data processed from the National Registry of Patients with Congenital Heart Disorder.

Mandatory reporting of all groups of congenital diseases results from valid legal norms. Collection of reports and processing for SR is performed by the National Health Information Center (NHIC).

Reporting of congenital disorders has started in year 1964 at live-born children. In the period of 1964 – 1976 we observed 36 selected congenital disorders, which were surely possible to detect at newborns. In 1976 the number of monitored congenital disorders grew from 36 to 60. Based on requirements of WHO in 1991 the number of observed congenital disorders was enlarged by next 3 defects – thalassemia, phenylketonuria and cystic fibrosis. In 1994 the observing of congenital disorders was completed to all congenital disorders.

The obligatory reporting since 1994 is split in three groups of congenital disorders (CD):

1. CD of live-born children,
2. CD of stillborn children,
3. Prenatally detected CD, which were reason to legally induced abortions (LIA).

The report of congenital defects is submitted by health care facility – newborn ward, respectively newborn section and gynecological – obstetrical ward (if it is a legally induced abortion performed due to prenatal detected congenital defect).

The occurrence of congenital defects in population belongs to the most monitored indicators of health status of population. Several important factors in incidence of CD are reflecting genetic burdens, environmental changes, and level of health care. Therefore it is necessary to obtain the most accurate data about occurrence of CD in time sequence, as well as in territorial localization.

Data on reported CD are processed as aggregated (in spreadsheets of reported CD), and also separately for each single group (live-born children, stillborn children, LIA after prenatally detected CD).

**Congenital heart disorders (CHD)** belong to most frequent developmental anomalies. They form about one third of all congenital developmental anomalies. They occur at 0,8 – 1% of newborns. They arise during intrauterine development, but clinically are manifested mostly only after delivery. The cause of CHD genesis is not exactly known and therefore also prevention is difficult. Multifactorial influences (heritable, environmental, diseases of mother and alike) are assumed. The severity of CHD depends on range of structural and functional damage of heart. They increased significantly the mortality of newborns and infants, and definitely handicapped the surviving individuals. With the recent development of surgical technique, and increasing level of health care a big part of children with CHD is saved. 450 to 500 children with CHD are born annually in Slovakia.  $\frac{1}{4}$  does not need a surgical intervention, however  $\frac{3}{4}$  are referred to surgical correction.

With the multifactorial genesis of CHDs the importance of epidemiological methods of observing is increasing. Complete data on occurrence of CHDs in Slovakia exist since 1992. Simultaneously with arise Cardiocentre for children, was established a database of patients with CHD was formed together with the establishment of Children Cardiocenter, from which a National Registry of Patients with CHD arised, operated by NCZI.

Registry is filled from four resources, which are: 1. reports from children cardiologists, 2. clinical documentation of Children Cardiocentre Bratislava, 3. database of hospitalized, and 4. Death certificates and Statistical death report.

### **Incidence of congenital disorders**

Incidence of all CD in Slovakia is stabilized at the level 9,0 – 9,5/1 000 with inter-annual fluctuations around 0,8 ‰. It reflects the real occurrence of CD in Slovakia. Differences in occurrence between the periods 1998 – 2002 and 2003 – 2007 are not statistically important. Septal defects creating about 49 % of all anomalies. The biggest occurrence CD is Trenčín, Kosice a Bratislava counties.

### **Specific infant mortality of children with CHD**

While in years 1992 – 1993 from all of children born with CHD 15,4 % of children deceased till one year, in year 2006 it was 9,7 % of children. Specific infant mortality in the same year dropped from 1,7 ‰ to 0,6 ‰.

### **Prevalence of patients with CHD**

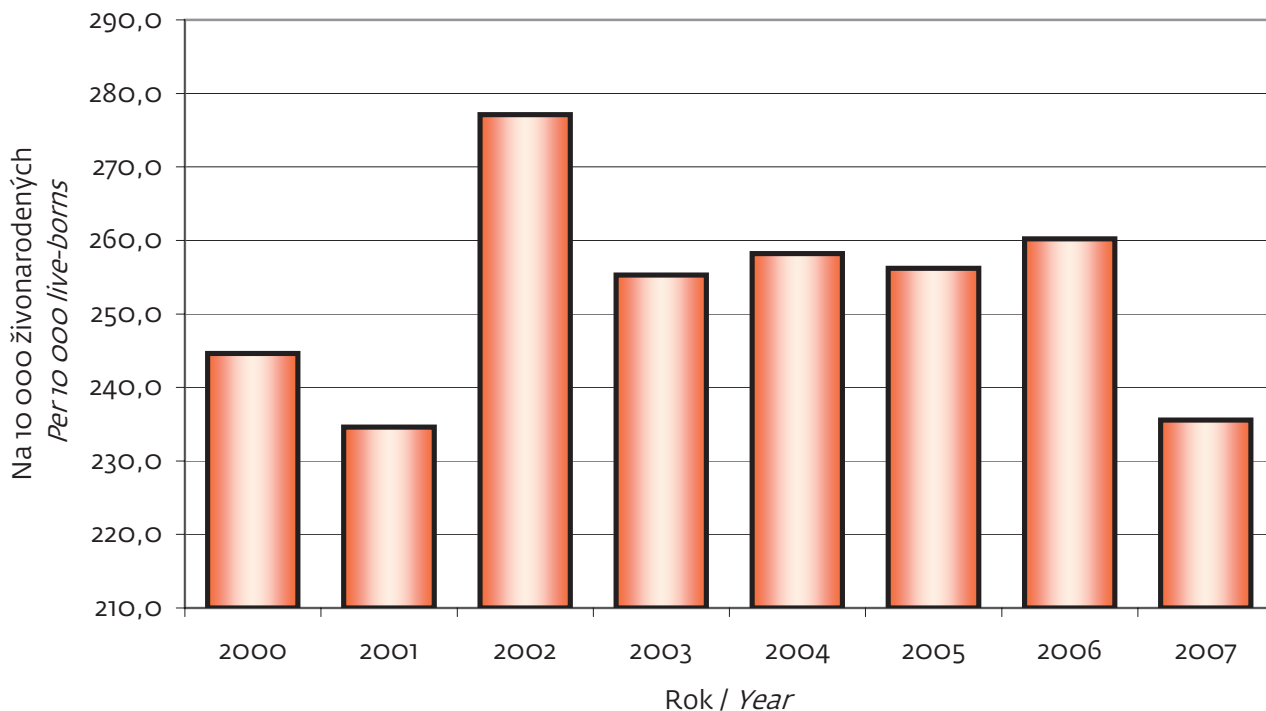
A total of **7 158 of children with CHD** was in age group 0 to 15 upto 31. 12. 2007 in SR. It represents a prevalence of **77,4 of patients per 10 000 children** of the given age group.

Selected epidemiological data processed via method of descriptive statistics and time rows are presented in relevant tables. The file is formed by the population of children born in years 1992 to 2007, where a CD was diagnosed clinicaly or post mortem.

### ŽIVONARODENÉ DETI S VRODENOU CHYBOU NA 10 000 ŽIVONARODENÝCH

LIVEBORN CHILDREN WITH CONGENITAL MALFORMATION ON 10 000 LIVE-BORN CHILDREN

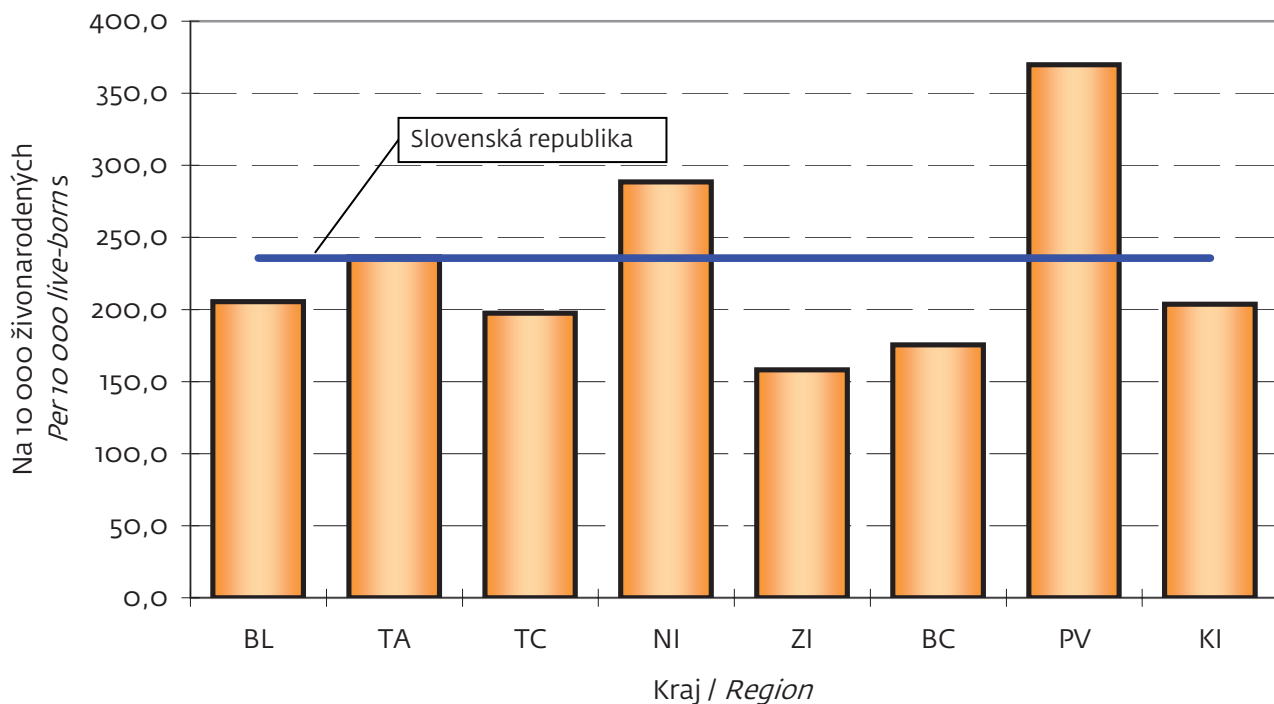
Graf 1.1



### ŽIVONARODENÉ DETI S VRODENOU CHYBOU NA 10 000 ŽIVONARODENÝCH PODĽA ÚZEMIA TRVALÉHO BYDLISKA MATKY

LIVEBORN CHILDREN WITH CONGENITAL MALFORMATION ON 10 000 LIVE-BORN CHILDREN  
BY TERRITORY OF MOTHER PERMANENT RESIDENCE

Graf 1.2



**VÝVOJ POČTU ŽIVONARODENÝCH DETÍ S VRODENOU CHYBOU NA 10 000 ŽIVONARODENÝCH  
DETÍ PODĽA ÚZEMIA TRVALÉHO BYDLISKA MATKY V ROKOCH 2000 – 2007**

DEVELOPMENT OF NUMBER OF LIVE-BORN CHILDREN WITH A CONGENITAL DEFECT  
ON 10 000 OF LIVE-BORN CHILDREN ACCORDING TO A PERMANENT RESIDENCE  
OF THE MOTHER IN YEARS 2000 – 2007

Tabuľka 1.1  
1/2

| Územie                     | Rok          |              |              |              |              |              |              |              |
|----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                            | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         |
| <b>Slovenská republika</b> | <b>244,6</b> | <b>234,6</b> | <b>277,1</b> | <b>255,3</b> | <b>258,2</b> | <b>256,2</b> | <b>260,2</b> | <b>235,6</b> |
| <b>Bratislavský kraj</b>   | <b>204,3</b> | <b>124,6</b> | <b>186,4</b> | <b>170,6</b> | <b>203,9</b> | <b>239,1</b> | <b>238,4</b> | <b>205,5</b> |
| Bratislava I               | 221,0        | 165,7        | 217,4        | 142,5        | 227,9        | 77,5         | 50,8         | 71,9         |
| Bratislava II              | 213,7        | 146,2        | 143,0        | 141,8        | 294,4        | 170,3        | 261,4        | 162,0        |
| Bratislava III             | 171,3        | 64,2         | 192,7        | 269,7        | 207,5        | 223,9        | 410,0        | 322,6        |
| Bratislava IV              | 176,1        | 70,4         | 129,9        | 165,2        | 177,9        | 321,8        | 378,4        | 313,9        |
| Bratislava V               | 228,9        | 156,6        | 199,3        | 163,6        | 98,1         | 371,2        | 169,7        | 101,4        |
| Malacky                    | 220,3        | 101,7        | 203,3        | 262,3        | 245,9        | 208,6        | 237,0        | 272,6        |
| Pezinok                    | 267,9        | 67,0         | 188,7        | 57,9         | 154,4        | 281,4        | 118,6        | 268,6        |
| Senec                      | 131,3        | 240,7        | 305,3        | 173,4        | 250,5        | 142,9        | 184,9        | 162,2        |
| <b>Trnavský kraj</b>       | <b>294,8</b> | <b>250,7</b> | <b>367,2</b> | <b>274,7</b> | <b>272,6</b> | <b>309,0</b> | <b>329,0</b> | <b>236,5</b> |
| Dunajská Streda            | 105,6        | 191,9        | 146,1        | 254,8        | 169,9        | 361,3        | 271,1        | 166,5        |
| Galanta                    | 575,4        | 310,7        | 729,2        | 304,1        | 97,3         | 175,7        | 610,5        | 514,1        |
| Hlohovec                   | 135,4        | 248,3        | 182,8        | 234,4        | 312,5        | 323,3        | 362,3        | 72,6         |
| Piešťany                   | 366,3        | 293,0        | 523,1        | 372,7        | 476,2        | 434,8        | 329,7        | 350,2        |
| Senica                     | 256,9        | 146,8        | 466,0        | 222,6        | 389,6        | 342,5        | 317,2        | 320,9        |
| Skalica                    | 321,8        | 275,9        | 182,8        | 133,9        | 334,8        | 230,9        | 114,4        | 117,1        |
| Trnava                     | 289,3        | 280,3        | 314,7        | 326,6        | 307,4        | 304,1        | 256,6        | 112,9        |
| <b>Trenčiansky kraj</b>    | <b>221,4</b> | <b>228,7</b> | <b>271,3</b> | <b>288,7</b> | <b>288,7</b> | <b>150,4</b> | <b>217,9</b> | <b>197,5</b> |
| Bánovce nad Bebravou       | 137,7        | 82,6         | 225,4        | 137,7        | 192,8        | 174,9        | 181,8        | 53,3         |
| Ilava                      | 210,5        | 210,5        | 87,0         | 467,7        | 356,3        | 140,6        | 291,7        | 313,7        |
| Myjava                     | 179,4        | 313,9        | 298,5        | 246,3        | 295,6        | 390,2        | 628,3        | 580,4        |
| Nové Mesto nad Váhom       | 254,5        | 145,5        | 303,0        | 378,2        | 273,1        | 113,4        | 95,2         | 189,0        |
| Partizánske                | 241,3        | 294,9        | 307,7        | 212,8        | 319,1        | 132,3        | 134,8        | 199,0        |
| Považská Bystrica          | 281,9        | 381,4        | 309,5        | 405,9        | 184,5        | 198,9        | 284,2        | 203,0        |
| Prievidza                  | 229,1        | 268,6        | 291,9        | 278,6        | 297,8        | 101,4        | 130,4        | 157,5        |
| Púchov                     | 267,5        | 267,5        | 267,6        | 209,4        | 471,2        | 151,5        | 379,5        | 152,3        |
| Trenčín                    | 174,4        | 135,7        | 299,8        | 229,8        | 262,6        | 150,0        | 202,9        | 170,0        |
| <b>Nitriansky kraj</b>     | <b>266,4</b> | <b>204,6</b> | <b>265,8</b> | <b>230,5</b> | <b>271,5</b> | <b>304,8</b> | <b>286,4</b> | <b>288,4</b> |
| Komárno                    | 577,3        | 348,6        | 520,3        | 522,0        | 707,7        | 506,6        | 573,6        | 497,9        |
| Levice                     | 247,0        | 173,8        | 196,3        | 153,4        | 235,2        | 373,1        | 278,6        | 212,8        |
| Nitra                      | 159,7        | 133,1        | 205,6        | 175,1        | 218,8        | 330,1        | 275,7        | 295,8        |
| Nové Zámky                 | 183,9        | 183,9        | 245,1        | 209,4        | 150,8        | 213,5        | 135,8        | 269,1        |
| Šaľa                       | 265,8        | 122,7        | 273,3        | 195,7        | 176,1        | 146,1        | 328,8        | 254,4        |
| Topoľčany                  | 247,3        | 340,0        | 272,0        | 185,2        | 185,2        | 281,0        | 286,6        | 110,8        |
| Zlaté Moravce              | 296,3        | 172,8        | 178,6        | 144,5        | 202,3        | 30,9         | 53,9         | 356,1        |
| <b>Žilinský kraj</b>       | <b>237,8</b> | <b>239,0</b> | <b>294,5</b> | <b>268,0</b> | <b>249,5</b> | <b>252,9</b> | <b>230,4</b> | <b>158,1</b> |
| Bytča                      | 246,6        | 164,4        | 376,8        | 246,9        | 246,9        | 393,9        | 340,9        | 147,5        |
| Čadca                      | 184,4        | 184,4        | 199,2        | 204,5        | 185,0        | 173,3        | 73,7         | 149,7        |
| Dolný Kubín                | 110,4        | 176,6        | 146,0        | 287,1        | 95,7         | 280,4        | 25,0         | 96,9         |
| Kysucké Nové Mesto         | 233,8        | 207,8        | 163,9        | 319,5        | 191,7        | 224,7        | 276,9        | 155,8        |
| Liptovský Mikuláš          | 446,0        | 417,3        | 178,0        | 519,7        | 519,7        | 384,0        | 177,5        | 180,7        |
| Martin                     | 164,1        | 229,8        | 449,6        | 240,5        | 263,5        | 88,5         | 70,8         | 103,9        |
| Námestovo                  | 282,8        | 282,8        | 313,2        | 192,7        | 215,4        | 89,2         | 179,4        | 152,2        |

## VÝVOJ POČTU ŽIVONARODENÝCH DETÍ S VRODENOU CHYBOU NA 10 000 ŽIVONARODENÝCH DETÍ PODĽA ÚZEMIA TRVALÉHO BYDLISKA MATKY V ROKOCH 2000 – 2007

DEVELOPMENT OF NUMBER OF LIVE-BORN CHILDREN WITH A CONGENITAL DEFECT ON 10 000 OF LIVE-BORN CHILDREN ACCORDING TO A PERMANENT RESIDENCE OF THE MOTHER IN YEARS 2000 – 2007

Tabuľka 1.1  
2/2

| Territory                   | Year         |              |              |              |              |              |              |              |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                             | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         |
| Ružomberok                  | 191,4        | 207,3        | 275,7        | 304,1        | 250,4        | 148,3        | 235,5        | 177,6        |
| Turčianske Teplice          | 243,9        | 243,9        | 80,0         | –            | 75,2         | 230,8        | 80,6         | 80,6         |
| Tvrdošín                    | 86,2         | 194,0        | 313,9        | 138,6        | 254,0        | 176,6        | 285,0        | 222,2        |
| Žilina                      | 296,5        | 246,1        | 374,6        | 303,5        | 261,1        | 486,3        | 488,9        | 188,7        |
| <b>Banskobystrický kraj</b> | <b>209,5</b> | <b>182,8</b> | <b>198,8</b> | <b>169,8</b> | <b>150,0</b> | <b>164,1</b> | <b>163,6</b> | <b>175,5</b> |
| Banská Bystrica             | 238,9        | 170,6        | 132,7        | 142,2        | 130,3        | 111,5        | 172,0        | 198,4        |
| Banská Štiavnica            | 65,8         | 197,4        | 135,1        | –            | 246,9        | 180,7        | 182,9        | 289,0        |
| Brezno                      | 155,8        | 93,5         | 183,6        | 50,5         | 151,5        | 145,9        | 150,6        | 150,0        |
| Detva                       | 102,4        | 136,5        | 147,1        | 109,9        | 219,8        | 166,1        | 68,3         | 73,3         |
| Krupina                     | 301,9        | 226,4        | 186,9        | 483,9        | 161,3        | 285,7        | 172,4        | 265,5        |
| Lučenec                     | 224,4        | 238,4        | 230,9        | 206,6        | 13,8         | 167,5        | 161,7        | 154,5        |
| Poltár                      | 300,4        | 214,6        | 257,7        | 48,3         | –            | 103,6        | 47,2         | 106,4        |
| Revúca                      | 368,7        | 276,5        | 204,9        | 156,3        | 290,2        | 167,0        | 176,5        | 418,4        |
| Rimavská Sobota             | 268,8        | 247,3        | 320,9        | 240,0        | 270,2        | 314,4        | 210,6        | 130,4        |
| Veľký Krtíš                 | 200,9        | 178,6        | 128,9        | 189,7        | 189,7        | 68,2         | 183,7        | 186,7        |
| Zvolen                      | 193,2        | 161,0        | 170,6        | 128,7        | 55,1         | 78,9         | 153,6        | 159,7        |
| Žarnovica                   | 0,0          | 141,8        | 164,6        | 316,7        | 135,7        | 211,0        | 172,4        | 128,8        |
| Žiar nad Hronom             | 109,9        | 65,9         | 165,7        | 116,6        | 69,9         | 93,5         | 145,3        | 69,1         |
| <b>Prešovský kraj</b>       | <b>286,0</b> | <b>331,9</b> | <b>370,3</b> | <b>363,0</b> | <b>337,5</b> | <b>356,6</b> | <b>353,1</b> | <b>369,9</b> |
| Bardejov                    | 191,7        | 170,4        | 102,4        | 169,9        | 124,6        | 89,3         | 249,7        | 193,2        |
| Humenné                     | 242,2        | 313,4        | 319,3        | 372,8        | 145,9        | 320,9        | 316,1        | 404,2        |
| Kežmarok                    | 296,6        | 370,7        | 453,2        | 352,3        | 322,9        | 387,5        | 333,6        | 205,4        |
| Levoča                      | 288,9        | 400,0        | 220,0        | 300,8        | 451,1        | 572,8        | 451,1        | 482,6        |
| Medzilaborce                | 270,3        | 180,2        | 610,7        | 608,7        | 87,0         | 307,7        | 168,1        | 200,0        |
| Poprad                      | 248,1        | 355,7        | 349,6        | 301,3        | 470,8        | 369,7        | 370,1        | 452,6        |
| Prešov                      | 235,5        | 291,9        | 257,1        | 277,3        | 288,4        | 386,6        | 353,1        | 334,9        |
| Sabinov                     | 251,4        | 320,0        | 285,7        | 172,4        | 295,6        | 298,1        | 243,1        | 361,0        |
| Snina                       | 329,4        | 352,9        | 512,8        | 446,2        | 524,9        | 448,2        | 385,7        | 480,2        |
| Stará Ľubovňa               | 476,2        | 568,8        | 740,2        | 662,0        | 507,0        | 535,2        | 595,9        | 607,4        |
| Stropkov                    | 259,3        | 481,5        | 447,8        | 436,7        | 218,3        | 297,0        | 279,1        | 277,8        |
| Svidník                     | 329,1        | 75,9         | 357,1        | 328,4        | 328,4        | 220,1        | 231,2        | 223,6        |
| Vranov nad Topľou           | 388,5        | 370,0        | 570,6        | 645,8        | 455,8        | 368,0        | 424,5        | 493,1        |
| <b>Košický kraj</b>         | <b>221,4</b> | <b>232,3</b> | <b>226,5</b> | <b>226,0</b> | <b>253,1</b> | <b>225,3</b> | <b>234,2</b> | <b>203,7</b> |
| Gelnica                     | 223,9        | 298,5        | 392,7        | 495,0        | 396,0        | 277,1        | 316,6        | 189,6        |
| Košice I                    | 159,4        | 275,4        | 62,4         | 175,4        | 190,1        | 224,4        | 147,5        | 179,4        |
| Košice II                   | 121,4        | 279,1        | 155,4        | 159,5        | 147,2        | 144,2        | 142,2        | 207,4        |
| Košice III                  | 197,4        | 164,5        | 198,0        | 222,9        | 286,6        | 220,8        | 261,4        | 292,2        |
| Košice IV                   | 142,1        | 142,1        | 172,1        | 270,7        | 304,6        | 278,7        | 383,9        | 118,0        |
| Košice-okolie               | 164,0        | 164,0        | 181,2        | 206,5        | 220,2        | 221,8        | 230,2        | 112,4        |
| Michalovce                  | 319,8        | 225,3        | 260,6        | 185,8        | 323,1        | 167,3        | 226,9        | 216,9        |
| Rožňava                     | 266,3        | 239,7        | 446,4        | 401,3        | 288,9        | 476,9        | 430,3        | 315,3        |
| Sobrance                    | 114,5        | 114,5        | 177,0        | 148,5        | 198,0        | 372,1        | 406,5        | 206,2        |
| Spišská Nová Ves            | 313,3        | 313,3        | 259,2        | 256,8        | 264,8        | 145,1        | 201,0        | 319,1        |
| Trebišov                    | 224,9        | 241,0        | 208,7        | 148,3        | 226,4        | 240,3        | 160,9        | 146,1        |



**HLÁSENÉ VRODENÉ CHYBY PODĽA ÚZEMIA TRVALÉHO BYDLISKA MATKY**

REPORTED CONGENITAL DEFECTS ACCORDING TO TERRITORIES  
OF PERMANENT RESIDENCE OF THE MOTHER

Tabuľka 1.2  
1/2

| Územie                     | Spolu        | v tom             |                    |   |
|----------------------------|--------------|-------------------|--------------------|---|
|                            |              | živonarodené deti | mŕtvonarodené deti | UPT z dôvodu prenatálne zistenej vrodenej chyby plodu |
| <b>Slovenská republika</b> | <b>1 322</b> | <b>1 282</b>      | <b>12</b>          | <b>28</b>   |
| <b>Bratislavský kraj</b>   | <b>130</b>   | <b>130</b>        | –                  | –   |
| Bratislava I               | 3            | 3                 | –                  | –   |
| Bratislava II              | 19           | 19                | –                  | –   |
| Bratislava III             | 20           | 20                | –                  | –   |
| Bratislava IV              | 29           | 29                | –                  | –   |
| Bratislava V               | 12           | 12                | –                  | –   |
| Malacky                    | 19           | 19                | –                  | –   |
| Pezinok                    | 17           | 17                | –                  | –   |
| Senec                      | 11           | 11                | –                  | –   |
| <b>Trnavský kraj</b>       | <b>120</b>   | <b>116</b>        | <b>2</b>           | <b>2</b>  |
| Dunajská Streda            | 18           | 17                | 1                  | –   |
| Galanta                    | 43           | 42                | 1                  | –   |
| Hlohovec                   | 3            | 3                 | –                  | –   |
| Piešťany                   | 18           | 18                | –                  | –   |
| Senica                     | 18           | 18                | –                  | –   |
| Skalica                    | 7            | 5                 | –                  | 2   |
| Trnava                     | 13           | 13                | –                  | –   |
| <b>Trenčiansky kraj</b>    | <b>109</b>   | <b>103</b>        | <b>2</b>           | <b>4</b>  |
| Bánovce nad Bebravou       | 3            | 2                 | –                  | 1   |
| Ilava                      | 19           | 17                | –                  | 2   |
| Myjava                     | 14           | 13                | 1                  | –   |
| Nové Mesto nad Váhom       | 10           | 10                | –                  | –   |
| Partizánske                | 8            | 8                 | –                  | –   |
| Považská Bystrica          | 11           | 11                | –                  | –   |
| Prievidza                  | 20           | 19                | 1                  | –   |
| Púchov                     | 7            | 6                 | –                  | 1   |
| Trenčín                    | 17           | 17                | –                  | –   |
| <b>Nitriansky kraj</b>     | <b>181</b>   | <b>175</b>        | <b>1</b>           | <b>5</b>  |
| Komárno                    | 47           | 47                | –                  | –   |
| Levice                     | 24           | 22                | –                  | 2   |
| Nitra                      | 43           | 42                | 1                  | –   |
| Nové Zámky                 | 35           | 32                | –                  | 3   |
| Šaľa                       | 13           | 13                | –                  | –   |
| Topoľčany                  | 7            | 7                 | –                  | –   |
| Zlaté Moravce              | 12           | 12                | –                  | –   |
| <b>Žilinský kraj</b>       | <b>111</b>   | <b>111</b>        | –                  | –   |
| Bytča                      | 5            | 5                 | –                  | –   |
| Čadca                      | 14           | 14                | –                  | –   |
| Dolný Kubín                | 4            | 4                 | –                  | –   |
| Kysucké Nové Mesto         | 5            | 5                 | –                  | –   |
| Liptovský Mikuláš          | 12           | 12                | –                  | –   |
| Martin                     | 9            | 9                 | –                  | –   |
| Námestovo                  | 13           | 13                | –                  | –   |

## HLÁSENÉ VRODENÉ CHYBY PODĽA ÚZEMIA TRVALÉHO BYDLISKA MATKY

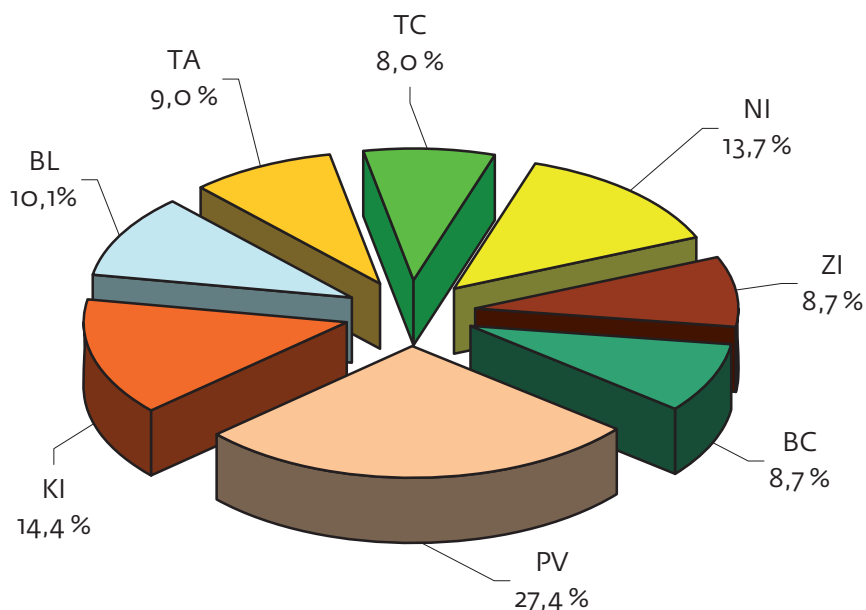
REPORTED CONGENITAL DEFECTS ACCORDING TO TERRITORIES  
OF PERMANENT RESIDENCE OF THE MOTHERTabuľka 1.2  
2/2

| Territory                   | Total      | included           |                    |  |
|-----------------------------|------------|--------------------|--------------------|--|
|                             |            | live-born children | stillborn children | LIA from a reason of prenatally detected congenital defect of foetus |
| Ružomberok                  | 10         | 10                 | –                  | –  |
| Turčianske Teplice          | 1          | 1                  | –                  | –  |
| Tvrdošín                    | 9          | 9                  | –                  | –  |
| Žilina                      | 29         | 29                 | –                  | –  |
| <b>Banskobystrický kraj</b> | <b>115</b> | <b>111</b>         | <b>1</b>           | <b>3</b>   |
| Banská Bystrica             | 20         | 20                 | –                  | –  |
| Banská Štiavnica            | 5          | 5                  | –                  | –  |
| Brezno                      | 9          | 9                  | –                  | –  |
| Detva                       | 2          | 2                  | –                  | –  |
| Krupina                     | 6          | 6                  | –                  | –  |
| Lučenec                     | 11         | 11                 | –                  | –  |
| Poltár                      | 2          | 2                  | –                  | –  |
| Revúca                      | 20         | 20                 | –                  | –  |
| Rimavská Sobota             | 15         | 13                 | 1                  | 1  |
| Veľký Krtíš                 | 7          | 7                  | –                  | –  |
| Zvolen                      | 10         | 10                 | –                  | –  |
| Žarnovica                   | 3          | 3                  | –                  | –  |
| Žiar nad Hronom             | 5          | 3                  | –                  | 2  |
| <b>Prešovský kraj</b>       | <b>362</b> | <b>351</b>         | <b>3</b>           | <b>8</b>   |
| Bardejov                    | 17         | 17                 | –                  | –  |
| Humenné                     | 27         | 27                 | –                  | –  |
| Kežmarok                    | 22         | 22                 | –                  | –  |
| Levoča                      | 18         | 18                 | –                  | –  |
| Medzilaborce                | 2          | 2                  | –                  | –  |
| Poprad                      | 52         | 52                 | –                  | –  |
| Prešov                      | 66         | 63                 | 1                  | 2  |
| Sabinov                     | 31         | 30                 | –                  | 1  |
| Snina                       | 18         | 17                 | –                  | 1  |
| Stará Ľubovňa               | 44         | 41                 | 2                  | 1  |
| Stropkov                    | 6          | 5                  | –                  | 1  |
| Svidník                     | 7          | 7                  | –                  | –  |
| Vranov nad Topľou           | 52         | 50                 | –                  | 2  |
| <b>Košický kraj</b>         | <b>194</b> | <b>185</b>         | <b>3</b>           | <b>6</b>   |
| Gelnica                     | 10         | 8                  | 1                  | 1  |
| Košice I                    | 11         | 11                 | –                  | –  |
| Košice II                   | 20         | 19                 | –                  | 1  |
| Košice III                  | 9          | 9                  | –                  | –  |
| Košice IV                   | 7          | 7                  | –                  | –  |
| Košice-okolie               | 17         | 17                 | –                  | –  |
| Michalovce                  | 29         | 27                 | 2                  | –  |
| Rožňava                     | 21         | 21                 | –                  | –  |
| Sobrance                    | 4          | 4                  | –                  | –  |
| Spišská Nová Ves            | 48         | 44                 | –                  | 4  |
| Trebišov                    | 18         | 18                 | –                  | –  |

### ŽIVONARODENÉ DETI S VRODENOU CHYBOU PODĽA TRVALÉHO BYDLISKA MATKY

LIVE-BORN CHILDREN WITH A CONGENITAL MALFORMATION ACCORDING TO PERMANENT RESIDENCE OF THE MOTHER

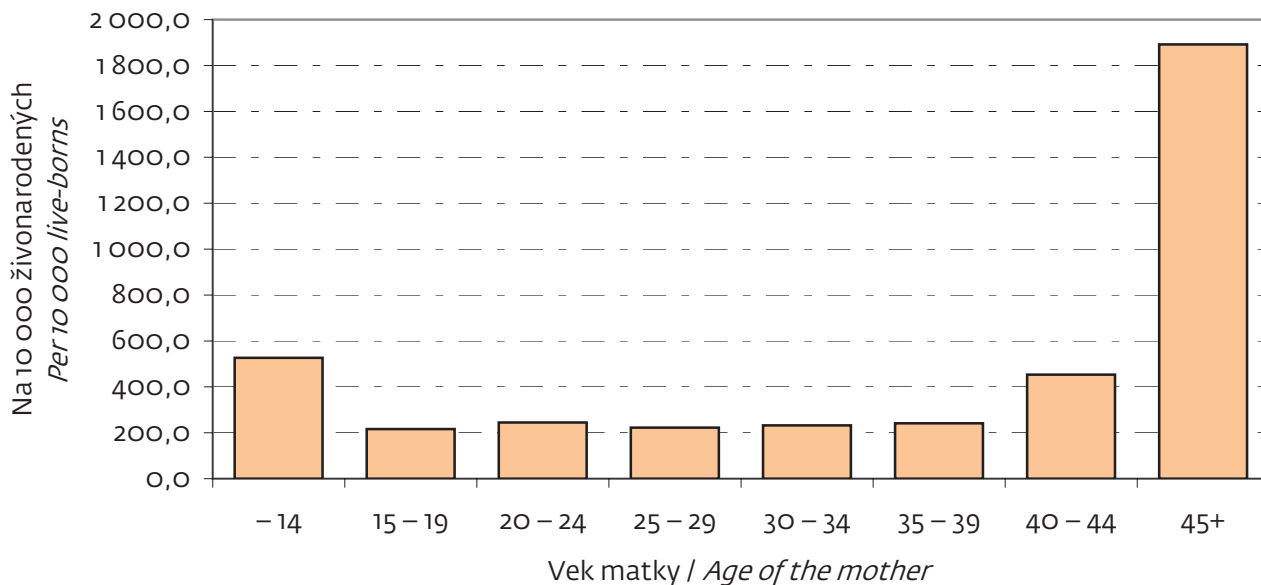
Graf 1.3



### ŽIVONARODENÉ DETI S VRODENOU CHYBOU NA 10 000 ŽIVONARODENÝCH DETÍ PODĽA VEKU MATKY

LIVE-BORN CHILDREN WITH A CONGENITAL MALFORMATION ON 10 000 LIVE-BORN CHILDREN ACCORDING TO AGE OF THE MOTHER

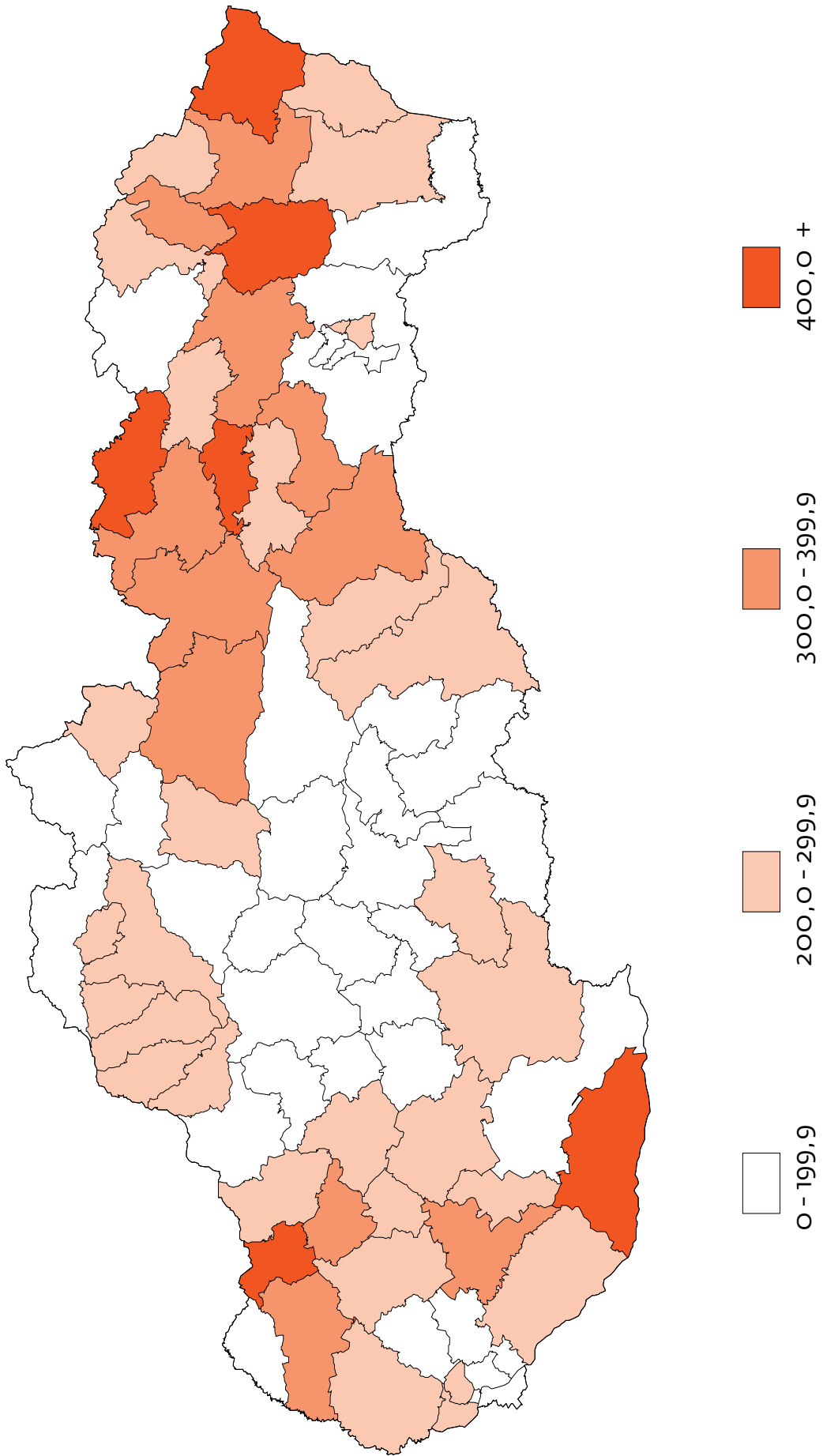
Graf 1.4



**PRIEMERNÝ POČET ŽIVONARODENÝCH DETÍ S VRODENOU CHYBOU NA 10 000 ŽIVONARODENÝCH DETÍ ZA OBDOBIE 2000 – 2007**

AVERAGE OF LIVE-BORN CHILDREN WITH A CONGENITAL MALFORMATION ON 10 000 LIVE-BORN CHILDREN IN PERIOD 2000 – 2007

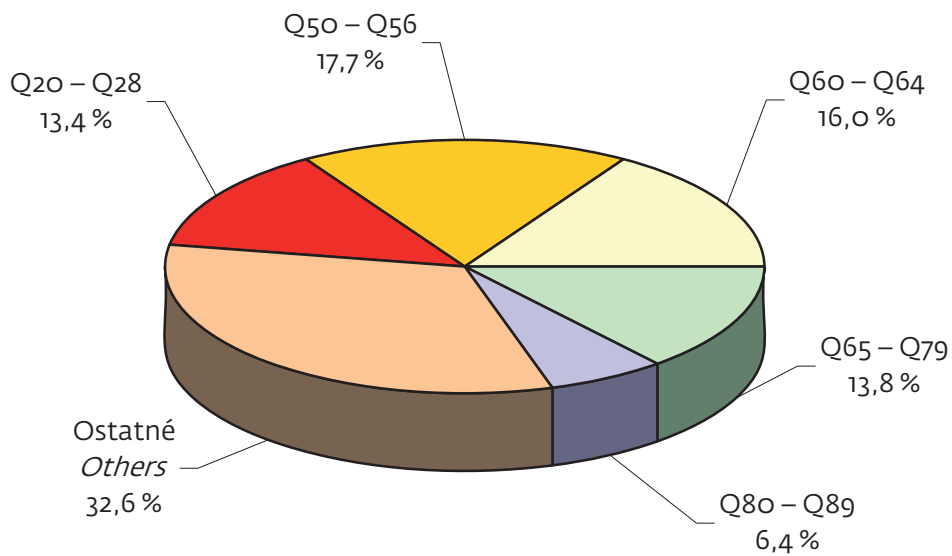
Mapa 1.1



### ŠTRUKTÚRA VRODENÝCH CHÝB U ŽIVONARODENÝCH CHLAPCOV

STRUCTURE OF CONGENITAL MALFORMATIONS BY LIVE-BORN BOYS

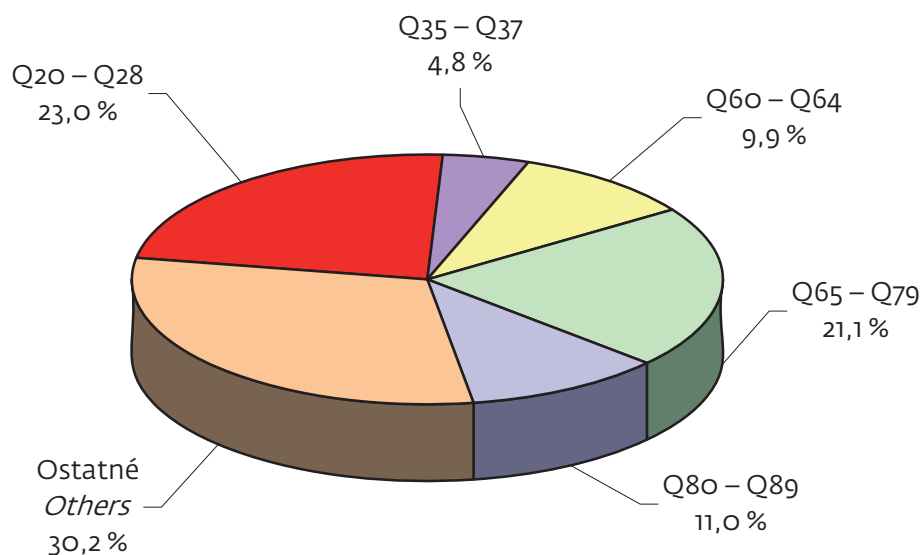
Graf 1.5



### ŠTRUKTÚRA VRODENÝCH CHÝB U ŽIVONARODENÝCH DIEVČAT

STRUCTURE OF CONGENITAL MALFORMATIONS BY LIVE-BORN GIRLS

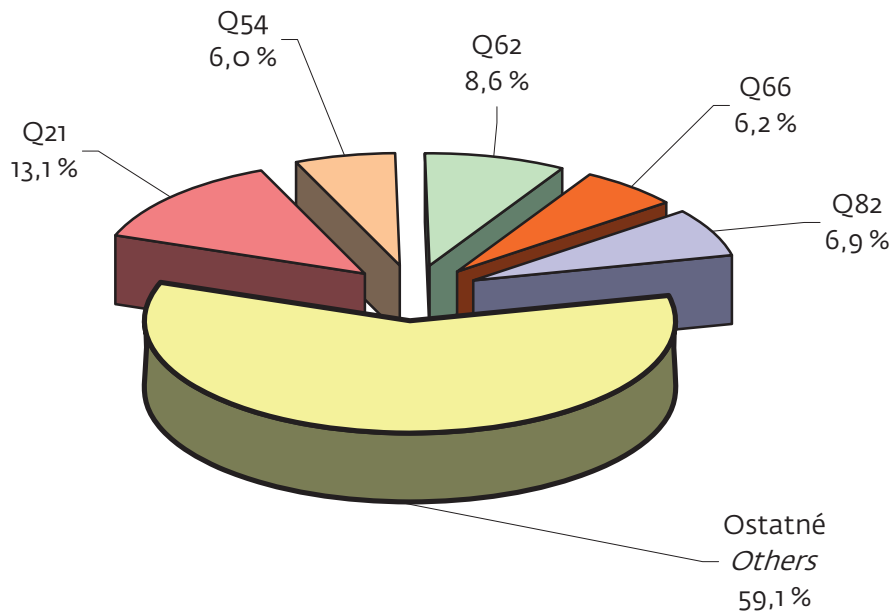
Graf 1.6



### PODIEL NAJPOČETNEJŠÍCH DIAGNÓZ VRODENÝCH CHÝB ŽIVONARODENÝCH V SR

PROPORTION OF MOST FREQUENT DIAGNOSES OF CONGENITAL DISORDERS OF LIVE-BORN IN SR

Graf 1.7



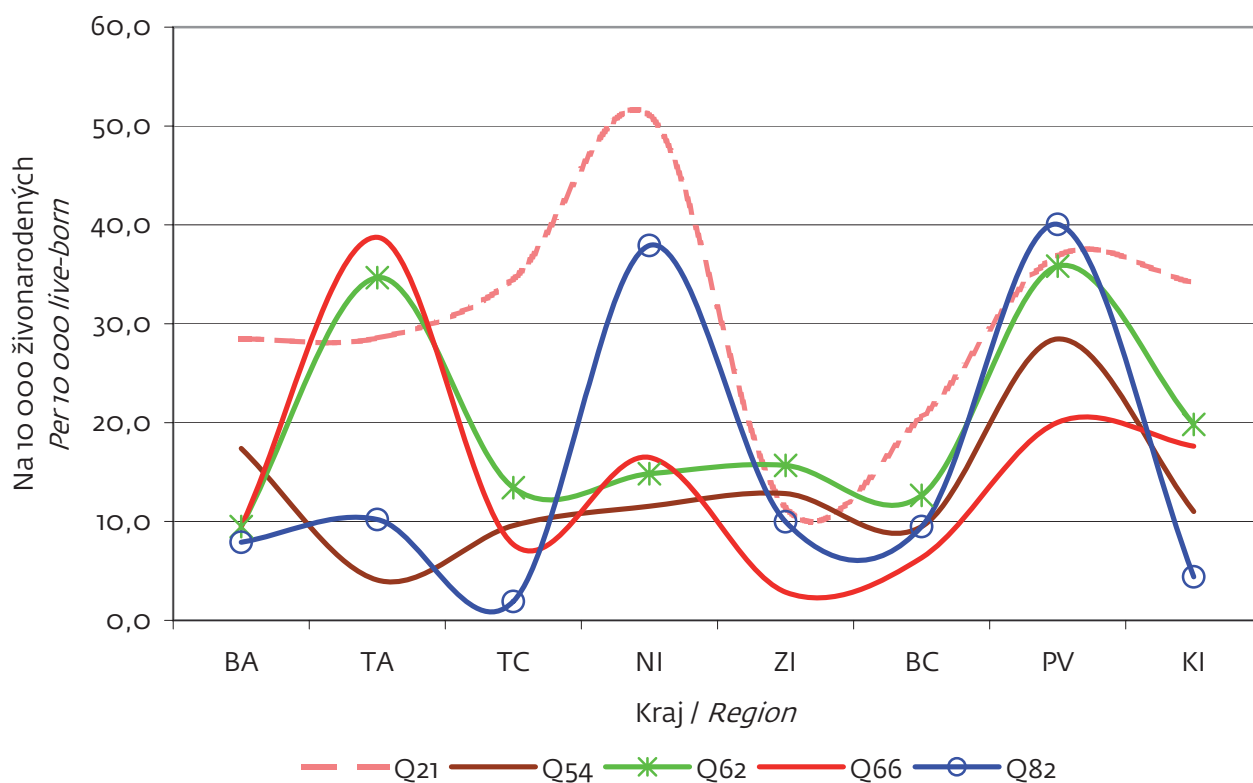
Poznámka: Podiel je vypočítaný z údajov prepočítaných na 10 000 živonarodených detí.

Notice: Ratio is calculated from data per 10 000 live-born children.

### NAJPOČETNEJŠIE DIAGNÓZY VRODENÝCH CHÝB U ŽIVONARODENÝCH PODĽA KRAJOV SR

MOST NUMEROUS DIAGNOSES OF CONGENITAL DISORDERS AT LIVE-BORNS BY COUNTIES OF SR

Graf 1.8



## HLÁSENÁ INCIDENCIA VRODENÝCH CHÝB SRDCA ZA ROKY 1998 – 2002 SPOLU

REPORTED INCIDENCE OF CONGENITAL HEART DISEASES IN PERIOD OF 1998 – 2002 TOTAL

Tabuľka 2.1

| Diagnóza podľa MKCH-10<br>Diagnosis ICD-10 | Počet prípadov<br>Number of cases | Miera incidencie<br>Incidence rate | 95 %-ný interval spoľahlivosti<br>95 % CI |              |
|--|-----------------------------------|------------------------------------|---|--------------|
|  |                                   |                                    | od<br>since                               | do<br>up to  |
| <b>Spolu / Total Q20 – Q28</b>             | <b>2 722</b>                      | <b>10,05</b>                       | <b>9,67</b>                               | <b>10,42</b> |
| Q20  | 176                               | 0,65                               | 0,55                                      | 0,75         |
| Q21  | 1 796                             | 6,63                               | 6,32                                      | 6,93         |
| Q22  | 117                               | 0,43                               | 0,35                                      | 0,51         |
| Q23  | 190                               | 0,70                               | 0,60                                      | 0,80         |
| Q24  | 85                                | 0,31                               | 0,25                                      | 0,38         |
| Q25  | 321                               | 1,18                               | 1,06                                      | 1,31         |
| Q26  | 30                                | 0,11                               | 0,07                                      | 0,15         |
| Q27  | 3                                 | 0,01                               | 0,00                                      | 0,02         |
| Q28  | 4                                 | 0,01                               | 0,00                                      | 0,03         |

Miera incidencie – počet prípadov na 1 000 živonarodených / Incidence rate – number of cases per 1 000 live-borns

## HLÁSENÁ INCIDENCIA VRODENÝCH CHÝB SRDCA ZA ROKY 2003 – 2007 SPOLU

REPORTED INCIDENCE OF CONGENITAL HEART DISEASES IN PERIOD OF 2003 – 2007 TOTAL

Tabuľka 2.2

| Diagnóza podľa MKCH-10<br>Diagnosis ICD-10 | Počet prípadov<br>Number of cases | Miera incidencie<br>Incidence rate | 95 %-ný interval spoľahlivosti<br>95 % CI |             |
|--|-----------------------------------|------------------------------------|---|-------------|
|  |                                   |                                    | od<br>since                               | do<br>up to |
| <b>Spolu / Total Q20 – Q28</b>             | <b>2 436</b>                      | <b>9,08</b>                        | <b>8,72</b>                               | <b>9,44</b> |
| Q20  | 167                               | 0,62                               | 0,53                                      | 0,72        |
| Q21  | 1 619                             | 6,04                               | 5,74                                      | 6,33        |
| Q22  | 105                               | 0,39                               | 0,32                                      | 0,47        |
| Q23  | 124                               | 0,46                               | 0,38                                      | 0,54        |
| Q24  | 57                                | 0,21                               | 0,16                                      | 0,27        |
| Q25  | 332                               | 1,24                               | 1,10                                      | 1,37        |
| Q26  | 19                                | 0,07                               | 0,04                                      | 0,10        |
| Q27  | 7                                 | 0,03                               | 0,01                                      | 0,05        |
| Q28  | 6                                 | 0,02                               | 0,00                                      | 0,04        |

Miera incidencie – počet prípadov na 1 000 živonarodených / Incidence rate – number of cases per 1 000 live-borns

## HLÁSENÁ INCIDENCIA VRODENÝCH CHÝB SRDCA S DIAGNÓZOU Q20 – Q28

REPORTED INCIDENCE OF CONGENITAL HEART DISORDERS WITH DIAGNOSIS Q20 – Q28

Tabuľka 2.3

| Rok<br>Year        | Počet<br>prípadov – incidencia<br>Number<br>of cases – incidence | Miera incidencie<br>Incidence rate | 95 %-ný interval spoľahlivosti<br>95 % CI |             |
|--------------------|--|------------------------------------|---|-------------|
|                    |  |                                    | od<br>since                               | do<br>up to |
| 1992               | 669  | 9,0                                | 8,29                                      | 9,64        |
| 1993               | 620  | 8,5                                | 7,80                                      | 9,13        |
| 1994               | 579  | 8,7                                | 8,02                                      | 9,43        |
| 1995               | 543  | 8,8                                | 8,10                                      | 9,58        |
| 1996               | 465  | 7,7                                | 7,03                                      | 8,43        |
| 1997               | 542  | 9,2                                | 8,40                                      | 9,94        |
| 1998               | 592  | 10,3                               | 9,46                                      | 11,10       |
| 1999               | 447  | 8,0                                | 7,22                                      | 8,68        |
| 2000               | 515  | 9,3                                | 8,54                                      | 10,14       |
| 2001               | 675  | 13,2                               | 12,21                                     | 14,19       |
| 2002               | 503  | 9,9                                | 9,03                                      | 10,75       |
| 2003               | 490  | 9,5                                | 8,64                                      | 10,31       |
| 2004               | 501  | 9,3                                | 8,51                                      | 10,13       |
| 2005               | 545  | 10,0                               | 9,18                                      | 10,85       |
| 2006               | 494  | 9,2                                | 8,36                                      | 9,97        |
| 2007 <sup>1)</sup> | 437  | 8,0                                | 7,28                                      | 8,78        |

Miera incidencie – počet prípadov na 1 000 živonarodených / Incidence rate – number of cases per 1 000 live-borns

<sup>1)</sup> Údaje za rok 2007 sú predbežné. / Data for 2007 are preliminary.



## DOJČENSKÁ ÚMRTNOSTĎ DETÍ S VCHS

### INFANT MORTALITY OF CHILDREN WITH CONGENITAL HEART DISORDER

Tabuľka 2.4

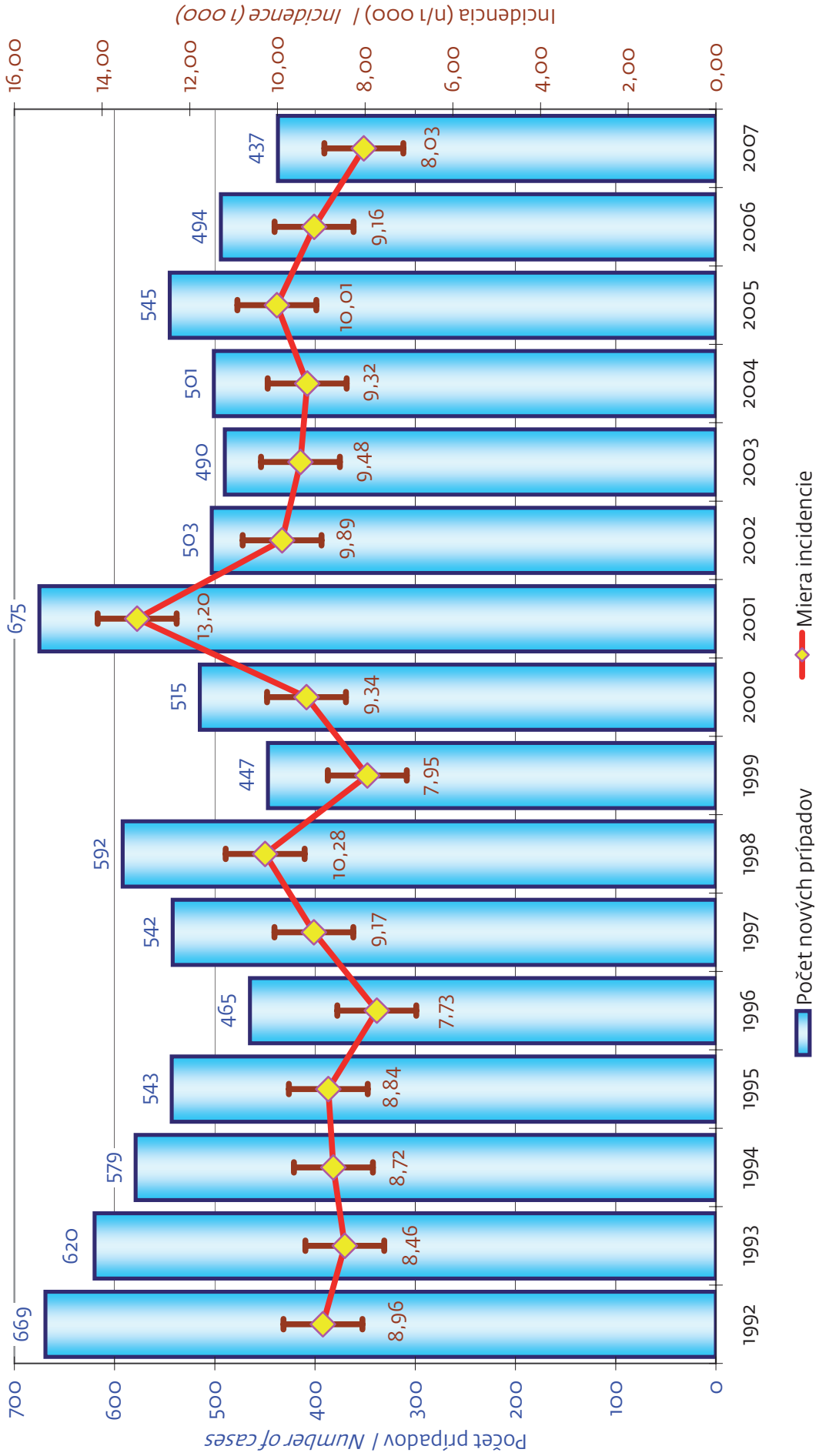
| Rok<br>Year        | Zomretí do 1 roka<br>Died within 1 year age | DÚVCHS<br>IMCHD | 95 %-ný interval spoľahlivosti<br>95 % CI |             |
|--------------------|---|-----------------|---|-------------|
|                    |   |                 | od<br>since                               | do<br>up to |
| 1992               | 107   | 1,42            | 1,15                                      | 1,69        |
| 1993               | 92  | 1,26            | 0,26                                      | 1,00        |
| 1994               | 95  | 1,43            | 0,29                                      | 1,14        |
| 1995               | 62  | 1,01            | 0,25                                      | 0,76        |
| 1996               | 54  | 0,90            | 0,24                                      | 0,66        |
| 1997               | 49  | 0,83            | 0,23                                      | 0,60        |
| 1998               | 42  | 0,73            | 0,22                                      | 0,51        |
| 1999               | 61  | 1,08            | 0,27                                      | 0,81        |
| 2000               | 39  | 0,71            | 0,22                                      | 0,49        |
| 2001               | 41  | 0,80            | 0,25                                      | 0,56        |
| 2002               | 43  | 0,85            | 0,25                                      | 0,59        |
| 2003               | 46  | 0,89            | 0,26                                      | 0,63        |
| 2004               | 48  | 0,89            | 0,25                                      | 0,64        |
| 2005               | 65  | 1,19            | 0,29                                      | 0,90        |
| 2006               | 48  | 0,89            | 0,25                                      | 0,64        |
| 2007 <sup>1)</sup> | 15  | 0,28            | 0,14                                      | 0,14        |
| 1992 – 2007        | 907   | 0,97            | 0,06                                      | 0,91        |

<sup>1)</sup> Údaje za rok 2007 sú predbežné. / Data for 2007 are preliminary.

VCHS – VÝSKYT V ROKOCH 1992 – 2007 V SR

CONGENITAL HEART DISORDERS – INCIDENCE IN PERIOD OF 1992 – 2007

Graf 2.1

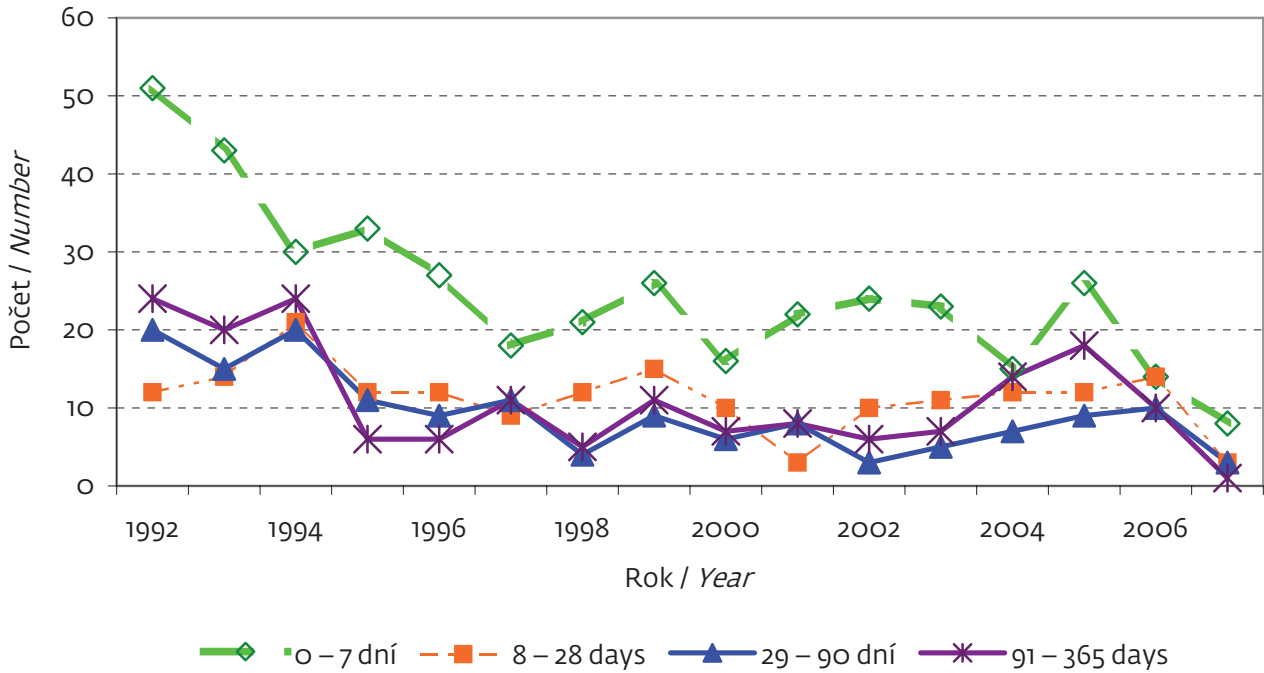


Údaje za rok 2007 sú predbežné. / Data for 2007 are preliminary.

### VÝVOJ DOJČENSKEJ ÚMRTNOSTI NA VRODENÉ CHYBY SRDCA S DIAGNÓZOU Q20 – Q28

EVOLUTION OF INFANT MORTALITY ON CONGENITAL HEART DISORDERS WITH DIAGNOSIS Q20 – Q28

Graf 2.2



### INCIDENCIA DOJČIAT NA VCHS 1998 – 2007

INCIDENCE OF INFANTS ON CONGENITAL HEART DISORDERS IN 1998 – 2007

Graf 2.3

