

# The most common causes of morbidity and mortality in children

## Demographics and Statistics

- 2006: approx. 2.2 million children in the Czech Republic (up to their 19th birthday)
- number of newborn – 2018: 114,000, 2006: 105,831, 2004: 97,664, 2003: 93,685
- infant mortality – 2018: 2.5 ‰, 2006: 3.3 ‰, 2003: 3.9 ‰
- from the point of view of pediatricians, the demographic development is unfavorable (in 1993, 135,000 children were born)

## Neonatal mortality (NI)

- **Total NICU** = dead newborns (up to the 28th day of life)/ all live births
- **Early NICU** = newborns who died before the 7th day of life/ all live births
- **Late NICU** = deceased newborns from the 8th to the 28th day of life/ all live births
- **Stillbirth** = stillbirths/all births
- **Perinatal mortality** = sum of stillbirth and early neonatal mortality
- **Postneonatal mortality** = proportion of children who died after 28 days to 1 year/ all live births
- **Infant mortality** = sum of neonatal and post-neonatal mortality
  - number of children born alive who do not live to see their 1st birthday
  - for statistics - number of deaths per 1000 live births
  - decline in mortality in the 1950s (ATB therapy, introduction of vaccination)
  - in 1991 infant mortality 9 per thousand (historically the first drop below 10 per thousand)

## Most common causes of death

### under one year of age

1. perinatal causes (premature babies, etc.) up to 50%
2. congenital malformations, deformities, chromosomal abnormalities (25%)
3. respiratory causes (5%)
4. SIDS
5. injuries and accidents
6. infections and diseases of the circulatory system

### 1-4 years

1. injuries
2. congenital malformations, deformations, chromosomal abnormalities
3. malignant tumors
4. murders
5. heart disorders

### 5-9 years

1. injuries
2. malignant tumors
3. congenital malformations, deformations, chromosomal abnormalities
4. murders
5. heart disorders

### 10-19 years

1. injuries
2. suicides
3. murders
4. malignant tumors
5. heart disorders

## Morbidity (disease) of children and adolescents

- increase in allergies – 108 allergy sufferers per 1,000 children under the age of 14 (+10 compared to 2001)
- psychosocial, psychiatric problems - increase from preschool age
- chronic diseases – a paradox associated with increased quality of care for serious diseases (management of previously incurable conditions), genetic factors combined with external ones (type 1 DM), new diagnosable

- and treatable diseases (hereditary metabolic disorders)
- diseases of the locomotor system - especially in teenagers
- nutrition disorders - all age categories
- a new "morbidity" of adolescents - pregnancy: in 2003, 26 girls under the age of 15 and 909 girls under the age of 18 gave birth
- at the JIRP clinic, about 80 poisonings per year, mainly alcohol for teenagers

## Prevention

- previously: vaccination, nutrition, hyg. habits
- today: accident prevention, proper lifestyle (moving school, ...)

## Links

## References

- LEBL, Jan – PROVAZNÍK, Kamil – HEJCMANOVÁ, Ludmila. *Preklinická pediatrie*. 2. edition. Praha : Galén, 2007. ISBN 978-80-7262-438-6.