



Czech Republic

The Child Safety Country Profile 2009 for Czech Republic highlights the burden of child and adolescent injury and examines socio-demographic determinants to provide a starting point for interpreting the results of the Czech Republic's Child Safety Report Card 2009 and for measuring progress toward and setting targets for reducing child and adolescent injury-related death and disability.

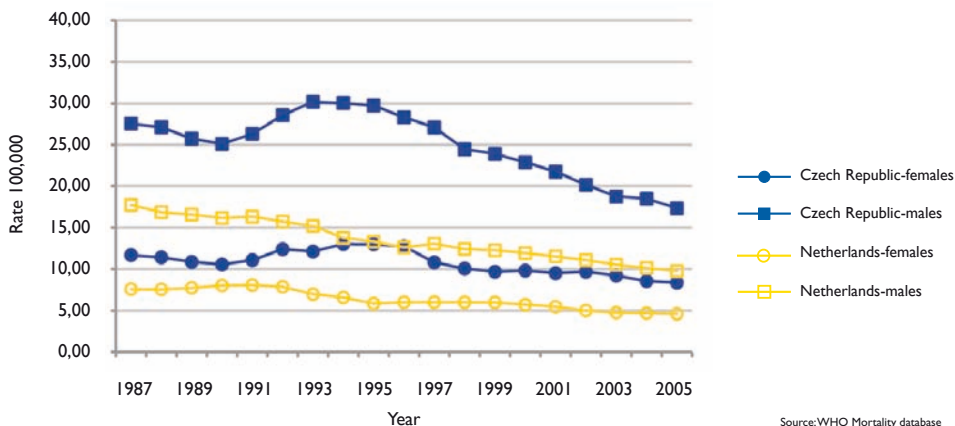
Injury is the leading cause of death in children and adolescents aged 0-19 years in the Czech Republic. When compared to the 24 countries participating in the child safety report cards in 2009, the Czech Republic's child and adolescent injury mortality rates ranked 16/24 and 17/24 for males and females, respectively, using the most recent year for which data are available. Injury deaths in children and adolescents in the Czech Republic in 2005 represented over 18,000 potential years of life lost (PYLL), including over 15,000 PYLL for unintentional injury – years where children and adolescents won't be growing, learning and eventually contributing to society (Table 1). Child and adolescent injury death rates have fallen consistently in the Czech Republic since the late 1980s (Figure A), but remain responsible for 32% of all child and adolescent deaths, more than all other causes combined.

A look at specific causes indicates that road traffic accidents continue to take the greatest toll, particularly in 15-19 year olds, however other causes of accidents also contribute significantly to injury deaths (Table 2). Of note are the higher rates of fall and drowning related deaths amongst males 15-19 years of age. However, deaths are just the tip of the 'injury iceberg' and many more children are hospitalised or seen in ambulatory care settings because of an injury. For example, data on in-patient hospitalisations for burns and poisonings (Table 3) stress the need for attention to the prevention of these types of injuries in early childhood, but also illustrate that poisonings are an issue for adolescents.

Table 1. Select measures of child and adolescent injury mortality

	Czech Republic	EU-27
Injury death rate children and adolescents 0-19 years/100 000 (2003-2005)	12.97	14.18
Potential years of life lost (PYLL) as a result of injury deaths to children and adolescents 0-19 years (2005)	18,237	—
Contribution of unintentional injuries to all child and adolescent mortality (2005)	26.58%	19.71%
Contribution of intentional injuries to all child and adolescent mortality (2005)	5.62%	4.65%

**Figure A. Child and adolescent injury deaths in the Czech Republic and the Netherlands
3-year moving averages for children and adolescents 0-19 years**



Source:WHO Mortality database

Table 2. Unintentional injury-related death rates by specific cause for children and adolescents 0-19 years, 3-year averages 2003-2005

	Injury death rate /100,000			
	Males		Females	
	0-14 yrs	15-19 yrs	0-14 yrs	15-19 yrs
Motorcycle drivers	0.00	0.79	0.00	0.00
Motor vehicle drivers / passengers	0.45	4.04	0.40	1.76
Pedestrians	1.04	3.36	0.89	1.71
Cyclists (traffic and non-traffic)	0.26	1.18	0.27	0.47
Drowning	1.14	1.68	0.49	0.78
Falls	0.33	1.19	0.34	0.93
Fires, burns and scalds	0.26	0.45	0.27	0.00
Poisoning	0.32	1.48	0.18	0.93
Choking/strangulation	1.22	1.09	1.20	0.47

Source:WHO Mortality database

Table 3. Unintentional injury-related in-patient hospitalisation rates for poisonings and burns for children and adolescents 0-19 years, 2006

	Injury in-patient hospitalisation rate /1000									
	Males					Females				
	<1	1-4	5-9	10-14	15-19	<1	1-4	5-9	10-14	15-19
Burns	2.47	3.12	0.40	0.40	0.34	1.56	2.18	0.35	0.15	0.14
Poisonings	1.73	4.07	0.94	0.96	1.64	1.46	3.27	0.66	1.32	2.27

Source:WHO European hospital morbidity database

Injuries disproportionately affect the most vulnerable children and adolescents in society and in many ways health relates to the wealth of the individual as well as the country.* More children and adolescents are injured when families are of lower income, have less education and are less literate, live in more crowded conditions and when adequate funding is not provided for public health as part of healthcare. In addition the continued loss of children and adolescents to injury is a critical demographic and economic issue.

It is important to look at these factors to help interpret the Czech Republic's response to the child and adolescent injury problem and Table 4 provides information on select socio-demographic measures and determinants of injury. Figure B provides a comparison of the availability and affordability of safety devices whose use is recommended to reduce the risk of child and adolescent injury. The Czech Republic needs to work to ensure that every child born is provided with a safe environment to live, learn, grow and play to ensure they grow up to be contributing members to society. This will require that inequalities, including availability and affordability of recommended safety equipment, are addressed in injury prevention policies and programming.

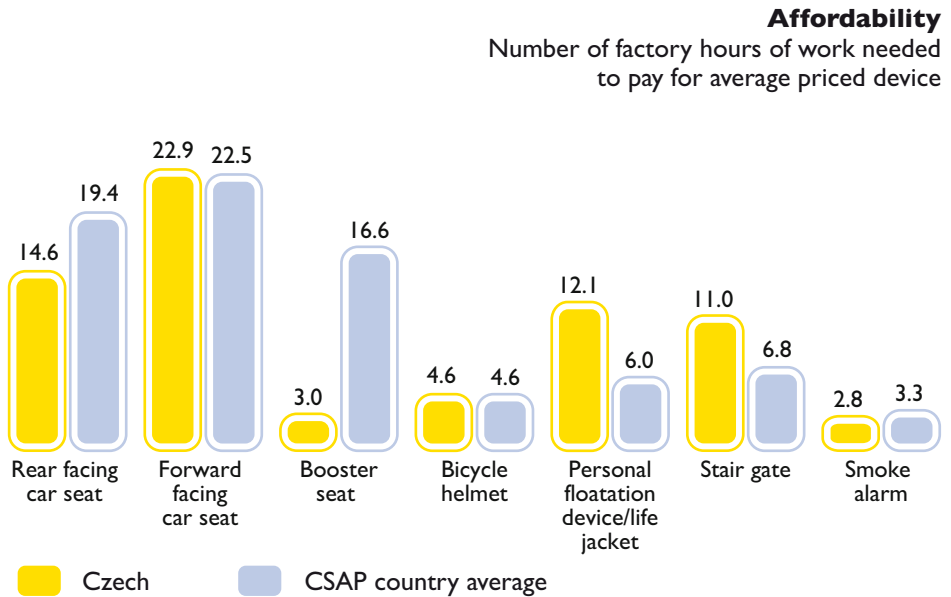
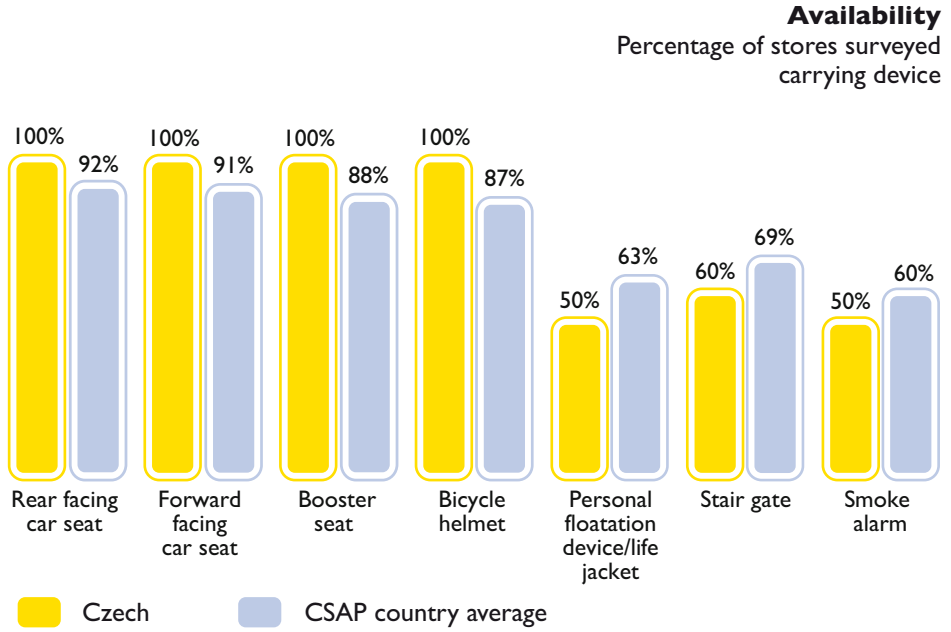
Table 4. Select socio-demographic measures and determinants of injury

	Czech Republic	EU-27
Total population (2008)	10,381,130	497,455,033
Average population density (population/square kilometre, 2006)	132.9	114.8
Percent urbanised (2006)	73%	74%
Percent population under 14 years of age (2007)	14.4%	15.8%
Natural population change (annual live births – annual deaths, 2008)	12,699	555,831
Adult illiteracy rate (% ages 15 and older, 1995-2005)	1.0%	1.5%
Gross Domestic Product (GDP) per capita PPS (index EU-27=100, 2008)	80.6	100
Total health expenditure as percent of GDP (WHO estimates, 2005)	7.1%	8.2%
Percent at-risk-of-poverty rate (after social transfers, 2006)	10%	16%
Percent children and adolescents aged 0-17 years living in jobless households (2007)	8.0%	9.4%
Human Development Index (HDI, 2005)	0.891	N/A
HDI Ranking in European Economic Region (2005)	20/29	—
GINI index (2006)	25	30
GINI index ranking in European Economic Region (2006)	5/29	—

N/A - not available

* UNICEF Innocenti Research Centre. A league table of child death by injury in rich nations. UNICEF; 2001. Report Card No. 2. Florence. Available from: <http://www.unicef-icdc.org/publications/pdf/repcard2e.pdf>

Figure B. Availability and affordability of select safety devices



Methods to prepare child safety profile

- The Child Safety Profile was developed by the Child Safety Action Plan Project (CSAP), a European initiative led by the European Child Safety Alliance of EuroSafe with co-funding and partnership from the European Commission, the Health and Environment Alliance (HEAL), UNICEF, the WHO Regional Office for Europe and country partners. One of the objectives of the CSAP project was to establish a set of indicators and standardised data collection tools focussing on child and adolescent injury to identify a baseline level of injury burden and action in participating countries. This both supports planning and provide a means of benchmarking and evaluating progress in reducing injury as countries move from planning to implementation.
- The purpose of the Child Safety Profile is to provide a starting point for interpreting the results of the Child Safety Report Card 2009 and for measuring progress toward and setting targets for reducing injury-related death and disability amongst children and adolescents. The Profile highlights the burden of child and adolescent injury and examines socio-demographic determinants of child and adolescent injury that may impact both burden and prevention efforts.
- Measures for the Profile were selected in conjunction with an expert advisory group made up of members from the HEAL, UNICEF, the WHO Regional Office for Europe and experts on indicators and child injury prevention from the Universities of Keele and the West of England, respectively.

Data on injury deaths and socio-demographic determinants were obtained from existing databases managed by several organisations including UNICEF, WHO, Eurostat and the United Nations Development Programme during 2008 and mortality and morbidity indicators were calculated at Kuratorium für Verkehrssicherheit (KfV) in Austria.

Data presented are for the most recent year(s) available from the data sources at the time of data collection. Mortality data are for ages 0-19 as data for ages 0-17 were not available.

Ranking for child and adolescent injury deaths by gender were done using 3-year averages of the most recent years available, in most cases 2003-2005.

Ranking for the Human Development Index (HDI) and GINI Index were done using data from UN Human Development Report 2007/2008 which uses most recent year of data available to calculate HDI and GINI index for a country; HDI ranking of 29/31 countries in European Economic Region (EEA) for which data were available.

Data on safety device availability and affordability were collected by country partners in the participating countries in 2008 and indicators were calculated at the European Child Safety Alliance.

Definitions and terms

At-risk-of-poverty rate after social transfers – the share of persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income (after social transfers). (Eurostat)

Children and adolescents aged 0-17 living in jobless households – the share of children and adolescents aged 0-17 who are living in households where no one is working. Both the numerators and the denominators come from the EU Labour force survey. (Eurostat)

Gini index – a quantitative index measuring inequality over the entire distribution of income or consumption; the GINI coefficient expressed as a percentage. A value of 0 represents perfect equality, and a value of 100 perfect inequality, thus the higher the coefficient, the higher the inequality of the income distribution. (United Nations Human Development Project)

Gross domestic product (GDP) – a measure of economic activity; the value of all goods and services produced less the value of any goods or services used in their creation. The volume index of GDP per capita in Purchasing Power Standards (PPS) is expressed in relation to the European Union (EU-27) average set to equal 100. If the index of a country is higher than 100 this country's level of GDP per head is higher than the EU average and vice versa. (Eurostat)

Human Development Index – a summary measure of human development. It measures the average achievements in a country in three basic dimensions of human development: 1) A long and healthy life, as measured by life expectancy at birth; 2) Knowledge, as measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight) and 3) a decent standard of living, as measured by GDP per capita in purchasing power parity (PPP) terms in US dollars. (United Nations Human Development Project)

Natural population change – the difference between the number of live births and the number of deaths during the year. A negative number means the number of deaths exceeds the number of births. (EuroStat)

Potential Years of Life Lost (PYLL) – an indicator of premature mortality representing the total number of years NOT lived by an individual who died before average life expectancy at birth. For this profile ages 78 and 83 were used for males and females, respectively.

More information at:
www.childsafetyeurope.org

The findings and views expressed are those of the authors and do not necessarily reflect the views of the partner organisations.

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