CHILD MORTALITY IN CROATIA DUE TO GENERAL EXTERNAL CAUSES AND TRAFFIC INJURIES BETWEEN 1995 AND 2014

MISLAV MARTINIĆ, MILAN MILOŠEVIĆ, URELIJA RODIN and AIDA MUJKIĆ

University of Zagreb, School of Medicine, University of Zagreb, School of Medicine, Andrija Štampar School of Public Health and Croatian Institute of Public Health, Zagreb, Croatia

In Croatia, injuries are the leading cause of death after first year of life throughout childhood. Therefore, the aim is to present trends in total mortality caused by injuries, and specifically traffic injuries, in the 0-19 age group in Croatia between 1995 and 2014, and to standardize data using the Eurostat European Standard Population for 2013. Methods: The population and mortality data used in this study were obtained from the Croatian Bureau of Statistics and prepared by the Croatian Institute of Public Health. Data on population and mortality were divided into five age groups and four 5-year periods, and all analyses were performed with the Statistica version 12 software. The results of this study showed a statistically significant decline in injuries, as well as in traffic injury death rates in Croatia in the 1-19 age group from 10.9 per 100,000 to 5.7 per 100,000 for boys and from 5.2 per 100,000 to 2.1 per 100,000 for girls in the 1995-2014 period. Conclusion: Although progress has been made in the child safety measures, additional education of parents and children, preventive actions and traffic safety promotion measures are needed to provide a safe environment for children.

Key words: children, mortality, injuries, traffic injuries, trends, Croatia

Address for correspondence: Professor Aida Mujkić, MD, PhD
University of Zagreb School of Medicine
Andrija Štampar School of Public Health
Rockefellerova 4
10 000 Zagreb, Croatia
Phone: +385915978790
E-mail: aida.mujkic@snz.hr

INTRODUCTION

Injuries are a major cause of death in childhood and adolescence throughout the world, and the World Health Organization (WHO) estimates that injuries are responsible for over 875,000 deaths in children and young people under the age of 18 each year (1). Of all fatal injuries, traffic accidents are the leading cause of fatal injuries in children and adolescents (2). Moreover, the World Health Statistics 2008 report predicted that traffic injuries would be one of the fastest growing public health concerns in the next 25 years (3).

The majority of child and adolescent injury deaths occur in low- and middle-income countries, and the largest growth in mortality due to traffic injuries is expected in these countries because of unequal development of road traffic and road traffic safety measures (2,4). Additionally, at the world level, child injury and fatal injuries are largely associated with gender, with 25% more injury deaths occurring among boys than among girls in the 1-14 age group (2). However, the majority of injuries are considered preventable (1,5). In the European Union, it is estimated that nearly half of the unintentional injury deaths could be avoided (6). Having that in mind, visible progress has been made since the injury mortality rates have decreased in recent years in developed countries (4,7-11). Nevertheless, injuries are still the leading cause of death in the EU among children aged 1-14, and are responsible for 38% of all deaths in this age group, and in high-income countries, injuries are still considered 'the last major plague of the young' as they are identified as the leading cause of long-term disability in children (12,13).

The burden of injuries is not only found in mortality and disability, but also in the increasing need for medical help, increasing costs for individuals, families and society as a whole, especially health service, de-
creasing the overall quality of life, causing demograph-
ic loss and immeasurable suffering. In Croatia, as in all
industrialized countries, injuries are the leading
cause of death in the 1-19 age group, surpassing all ot-
ther causes of death in this age group, while traffic inju-
ries account for the greatest proportion of all injuries
(14-16). Similar to other high- and middle-income
countries, Croatia has shown substantial progress in
lowering childhood mortality in general (17). In such
countries, the childhood death rates from infectious
diseases and malnutrition have decreased steadily
and are the leading contributor to the overall decline
in child mortality rates (18,19). Although childhood
mortality from injuries has also decreased, injuries
remain the leading cause of death among children af-

ter infancy in Croatia (20). Therefore, the aim of this
study was to present trends in total mortality caused
by traffic injuries in the 0-19 age group in the Republic
of Croatia during the 1995-2014 period, with an over-
view of total mortality due to violent causes in these
age groups in the given period.

METHODS

The data used in this study were obtained from the
Croatian Bureau of Statistics and prepared by the Cro-
atian Institute of Public Health. The data contained
information on the estimated population in Croatia in
the 1995-2014 period, as well as data on violent death
outcomes among children in the same period. Data
were divided into four 5-year periods (1995-1999,
data were separated according to gender and age gro-
ups (years): 0, 1-4, 5-9, 10-14 and 15-19 age groups.

not contain estimates on the population of children aged 0, therefore birth rate data for the respective ye-
ars were used instead. The underlying causes of death
were coded using a three-character code according to
the intent and mechanism, as specified by the Interna-
tional Classification of Diseases, 10th Revision (ICD-
10) (21). Death outcomes due to traffic injuries were
recognized as deaths that occurred as the consequence
of events and conditions classified by ICD-10 as trans-
port accidents (V01-V99).

All analyses were performed with the Statistica, versi-
on 12 software. The total Croatian population figures,
according to the Croatian Central Bureau of Statistics
data from 1995 to 2014, were used as the standard. Cru-
de age-specific rates were determined in five-year peri-
ods for both genders and for total sample. Direct stan-
dardization using the European Standard Population
(ESP) from 2013 was performed for all crude rates, and
appropriate rate ratios were found (22). The European
Standard Population (ESP) is an artificial population
structure which is used on weighing the mortality or
incidence data to produce age-standardized rates, ad-
ding up to a total of 100,000 persons. In our calculati-
s, we used data from the 2013 ESP for <19 age gro-
ups: 0 years – 1600 ESP, 1-4 years – 6400 ESP, 5-9 years
– 7000 ESP, 10-14 years – 7000 ESP and 15-19 years
7000 ESP. Confidence intervals (CI) were used to pre-
sent between-group differences. The age-standardized
rate for a particular condition (violent death outcomes
and violent death outcomes due to traffic accidents)
was obtained by applying the observed age-specific ra-
tes for the condition to a given standard population.
The ESP has become an accepted methodological
standard in health statistics in Europe. The 2013 ESP
considers changes in the EU population, providing a
more current, methodologically sound and widely ac-
ceptable basis for calculation of age-standardized ra-
tes. Age standardization is one of the key methods of
control for different age distributions among populati-
ons, or over time. Comparing crude rates can be mis-
leading in terms of trends when the age composition
in a population changes over time, or when comparing
groups or regions with different age structures.

Ethical considerations

This study used secondary data with no personal iden-
tifiers.

RESULTS

Study results are presented in Tables 1 to 8. The data
on fatal outcomes, as well as population estimates for
the given periods were separated into gender groups
and age groups: 0, 1-4, 5-9, 10-14 and 15-19 age gro-
ups.

In the 1995-1999 period, there were a total of 495 fatal
traffic injuries in the child age groups, with 341 fatal
outcomes in the male group and 154 in the female
group. The age-standardized incidence of traffic injury
deaths in the 1995-1999 period was 10.9 per 100,000
(p=0.05; CI: 9.7-12.1) for boys and 5.2 per 100,000
(p=0.05; CI: 4.3-6.0) for girls (Table 1).
In the 2000-2004 period, there were a total of 453 fatal traffic injuries in the child age groups, with 331 fatal outcomes in the male group and 122 in the female group. The age-standardized incidence of traffic injury deaths in the 2000-2004 period was 11.7 per 100,000 (p=0.05; CI: 10.5-13.0) for boys and 4.6 per 100,000 (p=0.05; CI: 3.8-5.4) for girls (Table 3).

### Table 3

<table>
<thead>
<tr>
<th>Violent death outcomes due to traffic accidents</th>
<th>Outcomes</th>
<th>Population</th>
<th>Age - specific</th>
<th>Age - standardised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>0 yrs</td>
<td>4</td>
<td>108878</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1-4 yrs</td>
<td>24</td>
<td>459947</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5-9 yrs</td>
<td>33</td>
<td>665208</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>10-14 yrs</td>
<td>41</td>
<td>696291</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>15-19 yrs</td>
<td>229</td>
<td>748291</td>
<td>31</td>
</tr>
<tr>
<td>Girls</td>
<td>0 yrs</td>
<td>5</td>
<td>99681</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1-4 yrs</td>
<td>10</td>
<td>445072</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>5-9 yrs</td>
<td>21</td>
<td>634253</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>10-14 yrs</td>
<td>8</td>
<td>665367</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>15-19 yrs</td>
<td>78</td>
<td>716924</td>
<td>11</td>
</tr>
<tr>
<td>Age-standardised incidence*</td>
<td></td>
<td></td>
<td></td>
<td>11.7 (95% CI: 10.5-13.0)</td>
</tr>
</tbody>
</table>

Age-standardised rates per 100,000 population for specific age groups using the European Standard Population (ESP, 2013)

In the 2000-2004 period, there were a total of 844 violent death outcomes in the child age groups, with 625 fatal outcomes in the male group and 219 in the female group. The age-standardized incidence of violent deaths in the 2000-2004 period was 22.4 per 100,000 (p=0.05; CI: 20.6-24.1) for boys and 8.3 per 100,000 (p=0.05; CI: 7.2-9.4) for girls (Table 4).

### Table 4

<table>
<thead>
<tr>
<th>Violent death outcomes</th>
<th>Outcomes</th>
<th>Population</th>
<th>Age - specific</th>
<th>Age - standardised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>0 yrs</td>
<td>19</td>
<td>108878</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>1-4 yrs</td>
<td>58</td>
<td>459947</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>5-9 yrs</td>
<td>57</td>
<td>665208</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>10-14 yrs</td>
<td>85</td>
<td>696291</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>15-19 yrs</td>
<td>406</td>
<td>748291</td>
<td>54</td>
</tr>
<tr>
<td>Girls</td>
<td>0 yrs</td>
<td>5</td>
<td>99681</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1-4 yrs</td>
<td>10</td>
<td>445072</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>5-9 yrs</td>
<td>21</td>
<td>634253</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>10-14 yrs</td>
<td>8</td>
<td>665367</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>15-19 yrs</td>
<td>78</td>
<td>716924</td>
<td>11</td>
</tr>
<tr>
<td>Age-standardised incidence*</td>
<td></td>
<td></td>
<td></td>
<td>22.4 (95% CI: 20.6-24.1)</td>
</tr>
</tbody>
</table>

Age-standardised rates per 100,000 population for specific age groups using the European Standard Population (ESP, 2013)
Table 4 - cont

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outcomes</td>
<td>Population</td>
</tr>
<tr>
<td>Girls</td>
<td>0 yrs</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>1-4 yrs</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>5-9 yrs</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>10-14 yrs</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>15-19 yrs</td>
<td>126</td>
</tr>
</tbody>
</table>

Age-standardised rates per 100,000 population for specific age groups using the European Standard Population (ESP, 2013)

In the 2005-2009 period, there were a total of 355 fatal traffic injuries in the child age groups, with 273 fatal outcomes in the male group and 82 in the female group. The age-standardized incidence of traffic injury deaths in the 2005-2009 period was 10.5 per 100,000 (p=0.05; CI: 9.3-11.8) for boys and 3.4 per 100,000 (p=0.05; CI: 2.7-4.1) for girls (Table 5).

Table 5
Violent death outcomes due to traffic accidents in the child age groups in the 2005-2009 period

<table>
<thead>
<tr>
<th>Violent death outcomes due to traffic accidents</th>
<th>2005-2009</th>
<th>2010-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outcomes</td>
<td>Population</td>
</tr>
<tr>
<td>Boys</td>
<td>0 yrs</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>1-4 yrs</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>5-9 yrs</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>10-14 yrs</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>15-19 yrs</td>
<td>212</td>
</tr>
</tbody>
</table>

Age-standardised rates per 100,000 population for specific age groups using the European Standard Population (ESP, 2013)

In the 2005-2009 period, there were a total of 355 fatal traffic injuries in the child age groups, with 273 fatal outcomes in the male group and 82 in the female group. The age-standardized incidence of traffic injury deaths in the 2005-2009 period was 10.5 per 100,000 (p=0.05; CI: 9.3-11.8) for boys and 3.4 per 100,000 (p=0.05; CI: 2.7-4.1) for girls (Table 5).

Table 6
Fatal outcomes due to all violent causes in the child age groups in the 2005-2009 period

<table>
<thead>
<tr>
<th>Violent death outcomes</th>
<th>2005-2009</th>
<th>2010-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outcomes</td>
<td>Population</td>
</tr>
<tr>
<td>Boys</td>
<td>0 yrs</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>1-4 yrs</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>5-9 yrs</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>10-14 yrs</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>15-19 yrs</td>
<td>341</td>
</tr>
</tbody>
</table>

Age-standardised rates per 100,000 population for specific age groups using the European Standard Population (ESP, 2013)

In the 2005-2009 period, there were a total of 355 fatal traffic injuries in the child age groups, with 273 fatal outcomes in the male group and 82 in the female group. The age-standardized incidence of traffic injury deaths in the 2005-2009 period was 10.5 per 100,000 (p=0.05; CI: 9.3-11.8) for boys and 3.4 per 100,000 (p=0.05; CI: 2.7-4.1) for girls (Table 5).

Table 7
Violent death outcomes due to traffic accidents in the child age groups in the 2010-2014 period

<table>
<thead>
<tr>
<th>Violent death outcomes due to traffic accidents</th>
<th>2010-2014</th>
<th>2010-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outcomes</td>
<td>Population</td>
</tr>
<tr>
<td>Boys</td>
<td>0 yrs</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1-4 yrs</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>5-9 yrs</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>10-14 yrs</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>15-19 yrs</td>
<td>100</td>
</tr>
</tbody>
</table>

Age-standardised rates per 100,000 population for specific age groups using the European Standard Population (ESP, 2013)

In the 2005-2009 period, there were a total of 355 fatal traffic injuries in the child age groups, with 273 fatal outcomes in the male group and 82 in the female group. The age-standardized incidence of traffic injury deaths in the 2005-2009 period was 10.5 per 100,000 (p=0.05; CI: 9.3-11.8) for boys and 3.4 per 100,000 (p=0.05; CI: 2.7-4.1) for girls (Table 5).
In the 2009-2014 period, there were a total of 386 violent death outcomes in the child age groups, with 277 fatal outcomes in the male group and 109 in the female group. The age-standardized incidence of violent deaths in the 2000-2004 period was 11.5 per 100,000 (p=0.05; CI: 10.2-12.9) for boys and 4.8 per 100,000 (p=0.05; CI: 3.9-5.7) for girls (Table 8).

### Table 8

**Fatal outcomes due to all violent causes in the child age groups in the 2010-2014 period**

<table>
<thead>
<tr>
<th>Violent death outcomes</th>
<th>2010-2014</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outcomes</td>
<td>Population</td>
<td>Age-specific</td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-1 yrs</td>
<td>8</td>
<td>107917</td>
<td>7</td>
</tr>
<tr>
<td>1-4 yrs</td>
<td>16</td>
<td>436235</td>
<td>4</td>
</tr>
<tr>
<td>5-9 yrs</td>
<td>22</td>
<td>530889</td>
<td>4</td>
</tr>
<tr>
<td>10-14 yrs</td>
<td>35</td>
<td>580339</td>
<td>6</td>
</tr>
<tr>
<td>15-19 yrs</td>
<td>196</td>
<td>635720</td>
<td>31</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 yrs</td>
<td>6</td>
<td>100866</td>
<td>6</td>
</tr>
<tr>
<td>1-4 yrs</td>
<td>11</td>
<td>413222</td>
<td>3</td>
</tr>
<tr>
<td>5-9 yrs</td>
<td>13</td>
<td>502316</td>
<td>3</td>
</tr>
<tr>
<td>10-14 yrs</td>
<td>17</td>
<td>552058</td>
<td>3</td>
</tr>
<tr>
<td>15-19 yrs</td>
<td>62</td>
<td>607461</td>
<td>10</td>
</tr>
<tr>
<td><strong>Age-standardised incidence</strong></td>
<td>11.5 (95% CI: 10.2-12.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age-standardised incidence</strong></td>
<td>4.8 (95% CI: 3.9-5.7)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Age-standardised rates per 100,000 population for specific age groups using the European Standard Population (ESP, 2013)

**DISCUSSION**

This analysis has made it clear that in Croatia, as in the majority of Central European countries, progress has been made in the field of child road traffic safety (23). This progress is seen especially when interpreting results in the female group, showing gradual decrease in the standardized death rates due to traffic injuries in the study period. When comparing the 5-year periods, the most significant decline is seen when comparing the 1995-1999 and 2010-2014 periods, from 5.2 per 100,000 to 2.1 per 100,000.

In the male group, progress has been made, but it has taken more time, as in the 1995-1999, 2000-2004 and 2005-2009 periods there was no statistically significant decline in death rates due to traffic injuries. However, when comparing the 2010-2014 period with previous periods, a substantial statistically significant decline is seen, from 11.7 per 100,000 in the 2000-2004 period to 5.7 per 100,000 in the 2010-2014 period.

In all four 5-year periods, a statistically significant difference was found between death rates according to gender, with boys being victims of traffic injuries more often than girls, especially in the 14-19 age group. However, the difference was decreasing, most prominently in the 2010-2014 period.

The largest decline in child death rates due to traffic injuries occurred in the 2010-2014 period, which could signify that the 2008 Road Traffic Safety Act and preventive measures implemented by the Croatian Ministry of Interior in recent years had been successful.

Our results also showed gradual decline in the overall violent death outcomes in both gender groups, from 31.1 per 100,000 in the 1995-1999 period to 11.5 per 100,000 in the 2010-2014 period in the male group and from 13.4 per 100,000 in the 1995-1999 period to 4.8 per 100,000 in the 2010-2014 period in the female group. These results suggest that, in the female group, traffic injury death rates followed the trends of the overall violent death rates, with gradual declines over the periods analyzed. Traffic injuries accounted for about half of all violent deaths in the 0-19 year age group in the female group in the periods analyzed. However, in the male group, there was no statistically significant change in death rates due to traffic injuries until the 2010-2014 period, while a gradual decline in the overall violent death rates is seen throughout the study period. While in the 1995-1999 period, traffic accidents accounted for roughly one-third of all violent death outcomes, in the subsequent periods traffic accidents accounted for around half of all violent death outcomes. Additionally, the results showed that the overall violent death rates were statistically significantly higher in the male group than in the female group throughout the study period. In this period, many activities were undertaken aimed at decreasing the number of casualties among children, especially those caused by traffic accidents. In 1994, the Croatian Ministry of Interior launched the National Road Safety Program, the goal of which was to decrease the rates of traffic injuries, traffic injury related deaths and long-term disabilities over years (23-25). Since 1995, the best known preventive action regarding traffic safety known as Poštujte naše znakove (Respect Our Signs) has been implemented in Croatia every September at the beginning of academic year (26). In 2008, the Road Traffic Safety Act 27 introduced repressive measures, such as prohibiting young drivers aged 16-24 from driving while under influence of any detectable level of alcohol or drugs, and driving vehicles with engine power exceeding 75 kW, but the same act additionally opened the possibility of other preventive campaigns, and in the same year the preventive campaign Child Car Seats was launched (27,28). In the following years, many preventive campaigns for child traffic safety...
have been conducted, such as Safe Cycling in Traffic in 2008, Child Car Seats in 2009, Use a ‘Glow Worm’ (reflector for pedestrians) – Be Safer in the Dark in 2009, My Friend the Policeman and I in Traffic in 2009, and Children – Friends in Traffic in 2009 (29-33). As part of the National Road Safety Program, Croatia joined the UN preventive movement Decade of Action for Road Safety in 2011 (34-36). To evaluate the progress made by legislative changes and prevention programs, and to provide deeper insight into the problem of traffic injury death rates in Croatia, a more detailed trend analysis of total mortality due to traffic injuries would be helpful. This study could show whether the child safety programs have been successful over the past 20 years, but could also facilitate public health policy development and program planning.

In conclusion, the decline in the death rates due to traffic injuries and due to violent causes in general is an encouraging result, but we believe that there is still much to be done in the prevention of child injuries, especially in traffic injury prevention, since the goal of every society should be creating a safe environment and safe traffic for all children, without injuries causing death or disability.

For further investigation, we suggest studies analyzing the reasons for unequal proportion of traffic injury deaths relative to total violent death outcomes in the 1995-1999 period between gender groups, and studies analyzing the reasons for the unequal trends in death rates due to traffic injuries between gender groups in the 1995-2009 period.

LIMITATIONS

Our study limitations resulted from limitations of the estimates of the Croatian population made by the Croatian Bureau of Statistics, which do not take migration into consideration when estimating the population. Furthermore, data for the years 1996, 2005-2007, 2009-2012 and 2014 do not contain estimates of the population of children aged 0 years, therefore data on birth rate were used instead.

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REFERENCES


Ozljede su u Hrvatskoj vodeći uzrok smrti djece nakon navršene prve godine života. Stoga je cilj ovog rada prikazati kretanje smrtnosti djece u dobi 0-19 godina zbog ukupnih ozljeda i ozljeda zadobivenih u prometu u Hrvatskoj u razdoblju od 1995. do 2014. godine te provesti standardizaciju koristeći se podacima Eurostata za Europsku Standardnu Populaciju za 2013. godinu. U istraživanju su korišteni podaci Državnog zavoda za statistiku o vanjskim uzrocima smrti od ozljeda te podaci o procjeni broja stanovnika prema petogodišnjim dobnim skupinama i spolu. Šifriranje uzroka smrti prema Međunarodnoj klasifikaciji bolesti i srodnih zdravstvenih problema, 10. revizija (MKB-10), provedeno je u Hrvatskom zavodu za javno zdravstvo temeljem podataka iz liječničkih potvrda o smrti. Razdoblje od 1995. do 2014. podijeljeno je u četiri petogodišnja razdoblja. Sve statističke analize provedene su statističkim paketom Statistica, 12. verzija. Rezultati pokazuju statistički značajan pad smrtnosti zbog ukupnih ozljeda i prometnih ozljeda u dobnim skupinama 0-19: od 10,9 na 100.000 na 5,7 na 100.000 za dječake te od 5,2 na 100.000 na 2,1 na 100.000 za djevojčice u razdoblju od 1995. do 2014. godine. Iako je napredak postignut, potrebno je nastaviti provoditi postojeće programe izobrazbe djece i roditelja te programe prevencije nesreća i unaprjeđenja sigurnosti u prometu.

**Ključne riječi:** djeca, smrtnost, ozljede, prometne nesreće, kretanje, Hrvatska