

INJURIES AND DEATHS OF CHILDREN IN TRAFFIC ACCIDENTS IN THE REPUBLIC OF SERBIA FOR THE PERIOD FROM 2018 TO 2022

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Abstract: Road traffic accidents represent one of the most serious challenges of modern society, with consequences that are measured not only in economic losses, but also in human lives and injuries. However, one particular population group bears the brunt of these accidents in a special way - children. All over the world, thousands of children enter the traffic system every day, whether as passengers, cyclists, pedestrians or future drivers, and are faced with the potential dangers posed by the traffic environment. Child safety in traffic is not only a matter of concern for current but also future generations. Every child who suffers an injury or loses his life in a traffic accident represents not only a personal tragedy but also a loss for society as a whole. It is therefore essential to recognize the importance and seriousness of this problem and to pay special attention to the safety of children in traffic.

The safety of children in traffic is not only the responsibility of parents and guardians, but also of society as a whole. Through education, the implementation of effective policies and technological innovations, an environment can be created in which children can enjoy a safer and more secure experience in traffic.

Key words: children, safety, traffic

1. INTRODUCTION

When we talk about children in traffic, we consider people aged 0-14. The urban environment today brings many challenges when it comes to the safety of children in traffic. Walking is the primary mode of transportation for parents and their children. However, as traffic becomes more busy and complex, special attention needs to be paid to how to keep children safer while crossing the street or walking on sidewalks.[1]

Child pedestrians face a variety of challenges when navigating traffic. Some of the main challenges include:

1. Poor hazard perception: Children often have an underdeveloped sense of danger and often fail to recognize potential hazards in traffic.
2. Limited visibility: Children's height and body size can make them less visible to drivers and other road users, increasing the risk of accidents.
3. Inexperience: Children lack experience in judging the speed and distance of vehicles, and are more prone to making mistakes when judging when it is safe to cross the street.
4. Lack of understanding of traffic rules: Younger children often do not understand all traffic rules and signs, making them susceptible to inappropriate behavior in traffic.
5. Inattention: Children can be careless and more likely to cause distractions while walking or crossing the road, especially when they are in the company of their peers, often crossing where they are not allowed to.
6. Child-unfriendly drivers: Car drivers often do not pay enough attention to pedestrians, especially children, which can lead to accidents.

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7. Mobile devices and distraction: The use of mobile phones and other electronic devices can distract children while moving in traffic.

8. Lack of safe pedestrian zones: The lack of pedestrian paths, sidewalks and safe pedestrian crossings can further complicate the safe movement of children in traffic.

9. Peer pressure: Sometimes children feel pressured by their peers to take risks and cross the street regardless of the danger. [1]- [2]

These challenges highlight the importance of educating children about road safety and the responsibility of parents, teachers, and local communities in creating a safe environment for pedestrians, especially children. Parents, teachers, and local communities can take appropriate measures and implement advice to protect children in traffic.

2. INJURIES AND DEATHS OF CHILDREN IN TRAFFIC ACCIDENTS IN THE PERIOD FROM 2018 TO 2022 ON THE TERRITORY OF THE REPUBLIC OF SERBIA

Data on traffic accidents and their consequences are one of the most significant and specific indicators of the state of traffic safety in an area, but also the most frequently used for the analysis of traffic safety. In the Republic of Serbia, children account for about 2% of fatalities and 5% of seriously injured persons, or about 7% of victims. The public risk of children's death is about 12, which means that 12 children per million lose their lives in traffic accidents, which is significantly higher than the European average, where the public risk of children is 6.8 (EU27, European Commission, 2022). In the Republic of Serbia, on average, about 12 children lose their lives and about 1,360 (about 170 HBI and 1,190 LBI) are injured in traffic accidents. In other words, every month one child dies and just over 110 children are injured in traffic accidents. ATS

When viewed by the characteristics of traffic participation, of the total number of children killed, child passengers account for almost half (49%), child pedestrians 39% and child drivers 12%. Children most often suffer serious injuries as pedestrians (47%), almost half, then as passengers (almost a third of seriously injured children (32%)) and as drivers (about a fifth (21%)). Table 1 shows the number of children killed and seriously injured by the characteristics of traffic participation by year, in the period from 2018 to 2022.

Table 1 Data on children killed and injured in traffic accidents for the period from 2018 to 2022.

Data	Children deaths				Children injuries			
Year	Driver	Traveler	Pedestrian	Total DTH	Driver	Traveler	Pedestrian	Total INJ
2018	0	5	7	12	35	51	87	173
2019	2	7	1	10	37	59	88	184
2020	2	7	4	13	43	41	68	152
2021	1	5	5	11	33	57	79	169
2022	2	5	6	13	28	67	85	180
Total	7	29	23	59	176	275	407	858
%	12%	49%	39%	100%	21%	32%	47%	100%

3. MEASURES AND ADVICE FOR PARENTS, TEACHERS, AND LOCAL COMMUNITIES

Measures and advice for parents:

1. Education: Teach your children about the basic rules of walking, crossing the street, and traffic signs.
2. Demonstration: Take your children to crosswalks and demonstrate how to cross the street safely, using marked crossings and traffic lights.
3. Supervision: Follow your children as they navigate traffic until they gain enough experience and confidence.
4. Use safe routes: Plan routes that allow children to use footpaths, sidewalks, and marked pedestrian crossings.
5. Use appropriate equipment: Wearing appropriate clothing when participating in traffic is of paramount importance to their safety. [4]- [5]

Measures and advice for local communities:

1. Building safe routes: Local authorities should invest in building safe pedestrian paths, sidewalks and marked pedestrian crossings.
2. Signage and lighting: Installing appropriate traffic signs, traffic lights and traffic signals in areas where children frequently move.
3. Education programmes: Organising road safety education programmes in local schools and communities to raise awareness of child safety.
4. School patrols: Primary schools can have school patrols to help children cross the street safely and monitor traffic.
5. Speed checks: Installing speed limit signs near schools and parks to slow down drivers in these areas.
6. Cooperation with local police: Cooperation with local police to ensure order and discipline in traffic and to sanction drivers if they do not follow the rules. [4]- [5]

Measures and advice for teachers:

1. Demonstration of correct behavior: demonstrate how to cross the street correctly, use marked pedestrian crossings. Practical demonstrations can help them understand the concept better.
2. Encourage communication with parents: to work together to raise awareness of traffic safety
3. Use visual materials: such as videos, posters and illustrations to visually demonstrate the concept of traffic safety
4. Organize simulations: simulate street crossings or traffic situations to practice correct traffic behavior. [4]- [5]

4. CONCLUSION

Younger children may have difficulties interpreting various sights and sounds, which may impact on their judgement regarding the proximity, speed and direction of moving vehicles. Younger children may also be impulsive, and their short attention spans mean that they struggle to cope with more than one challenge at a time. As they grow older, children of adolescent age are especially prone to take risks, compromising their safety on the road. In general roads are planned without sufficient consideration of the specific needs of children. [6]- [7]

Road traffic injuries are the leading killer of children and young people aged 5–29 years worldwide. In addition, rates of road traffic death among children are typically 3 times higher in low- and middle-income countries than in high-income countries.

Road traffic injuries can be prevented. While no single measure adequately addresses the vast range of risks to children on the road, the ten strategies below are those which are best known – especially when implemented as a package – to keep children safe on the road. [6]- [7]

- controlling speed
- reducing drinking and driving
- using helmets for bicyclists and motorcyclists
- restraining children in vehicles
- improving children's ability to see and be seen
- enhancing road infrastructure
- adapting vehicle design
- implementing graduated driver licensing.

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