

PREVENTION OF ROAD INJURIES IMPACTING CHILDREN IN SOUTH AFRICA (PRISCA)

Policy briefs: **Child Pedestrian Safety**



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PROJECT OVERVIEW

From January to December 2018, research and stakeholder engagements were conducted as part of Childsafe's Prevention of Road Injuries Impacting Children in South Africa (PRICSA) project.

The objective was to: explore the major South African contributors to this challenge; establish what interventions could be best suited to help address the problem; and lastly, to identify the correct stakeholders to adequately engage with, in addressing the issue of child pedestrian safety.

This policy brief considers the findings that emerged from the research programme relating to child passenger safety, child pedestrian safety and the need for safer zones around schools in particular. It also contains recommendations related to each of these three areas.

METHODS

ChildSafe² is an advocacy organisation that promotes child safety. It has been doing so for 40 years. With funding from UNICEF, and research conducted by the University of Cape Town, the PRICSA research project used primary and secondary methods and research tools to investigate the problem. The purpose of using these various research methods was to capture the complexity of the challenge and surface multiple perspectives. These include:

- A comprehensive literature review of the magnitude and extent of the challenge globally
- A comprehensive secondary data collection and report on the status quo of child road safety
- A series of stakeholder workshops conducted in all nine provinces of South Africa. These workshops included representatives from the departments of Transport, Health and Education. These fields play an important role in child road safety. Collaborations with multiple departments enables Childsafe to understand and tackle the problem through partnership
- A policy review of current legislation and policies that impact children, from the South African Constitution to national, provincial and local government mandates

² Registered Non-Profit Organisation as Child Accident Prevention Campaign of Southern Africa - www.childsafe.org.za

CHILD PEDESTRIAN SAFETY

Background

Globally 1.25 million deaths occur every year as a result of road traffic crashes (RTCs) (WHO, 2015). Koppits and Cropper (2002) estimated that between 2000 and 2020, road deaths will increase by 80% in low and middle-income countries (LMIC) such as South Africa. In high-income countries (HIC), road deaths decrease by 28% in the same period. Pedestrians, cyclists and motorcyclists in LMIC are termed as vulnerable road users.

Children are among those who are vulnerable on the road, with an estimated 500 children killed globally every day (WHO, 2008). South Africa, in turn, is one of the highest contributors to the road fatality epidemic and has the second highest fatality rate in the continent for the general population, at 31,7 fatalities per 100 000 population (Peden *et al.*, 2013). The country also has double the world's child pedestrian fatality rate (Matzopoulous *et al.*, 2008).



The WHO/Decade of Action for Road Safety (WHO/DOA, 2015) have listed the following broad 10 strategies that can improve the safety of children as part of the 2011 – 2020 programme:

- 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
- Reducing risks for young drivers
- Providing appropriate care for injured children
- Supervising children around roads.

A number of specific environmental factors increase the risk for children using the road system, these include (Peden *et al.*, 2008):

- Planning of land use and road networks, including:
 - Long, straight through-roads that encourage high vehicle speeds.
 - The availability or lack of playground spaces, resulting in children playing in the road.
 - Lack of facilities to separate road-users – such as lanes for cyclists and pavements for child pedestrians.
 - The existence of street vendor businesses, in which children may work.
- The availability of safe, efficient public transportation systems.
- Speed, particularly in residential areas where children play or walk to and from school
- Sites with high volumes of traffic

In South Africa, large numbers of children are walking to academic institutions and other destinations. In 2003, the South African National Household Travel Survey (NHTS), showed that 90.6% of the 7.5 million learners and students in South Africa, residing in rural and peri-urban areas, walked to schools and educational centres. In contrast, the 2013 version of the NHTS survey revealed the following trends:

- Approximately 63% of learners walked the entire distance to educational institutions, while those attending tertiary institutions tended to use taxis more than any other mode of transport. This shows a decrease of 27.6% in the number of children that walked in 2003, as seen previously.

- The percentage of learners walking all the way to school varies from 43% in Gauteng to 79% in Limpopo; the more rural a province the greater the likelihood of learners walking all the way.
- The National Department of Transport (DoT) initiated the Shova Kalula (Ride Easy) Programme in 2001, in order to provide bicycles to school-going children to enable easier travel to schools. The survey revealed that bicycle usage in the country has slightly increased by about 1.5% since 2003, suggesting that the Shova Kalula Programme has as yet had a negligible impact on the majority of children, who walk to school.

Many schools in rural communities in South Africa are located next to high speed roads and school children are at high risk when walking along these roads. High vehicular speed and the lack of walkways contribute to the risk.

Most notably, for children aged between 0-19, road traffic crashes account for 20% of all passenger and pedestrian deaths. Motor vehicle pedestrian collisions are also the leading cause of death among children of one to 14 years of age. This is despite enabling policy and legislation such as the Constitution of South Africa as well as the National Learner Transport Policy (2015)⁵, among other policies.

⁵ National Learner Transport Policy (2015)



Findings

It is evident that the road accident crisis is a global challenge. However, in the South African context it is worse when compared with global standards. This is also true when considering child road fatalities. In comparison with global norms, child fatality rates in the South African context is double that of global norms and standards. With limited formal data, it is difficult, perhaps impossible, to accurately quantify the extent to which children are affected by road accidents. In addition, road accidents have an impact at a personal level, which makes it even more difficult to assess the effects on the lives of children, their households and communities.

While limited, the data that does exist indicates the severity of the crisis of child pedestrian safety in South Africa. **The existing data infers that the problem currently reported is understated, and that in reality, the problem is worse than what it is thought to be.** The problem is complex, with multiple factors contributing to and exacerbating the challenge. These can be categorised into **micro factors**, such as personal, family or community; and **macro factors** such as education, enforcement, engineering, policy and legislation, which intersect to cause child road fatalities.

Analysing all affecting issues provides a better reflection of the underlying factors and identifies gaps that need to be addressed.

South Africa has adopted the Safe Systems approach. The concept behind the 'Safe System' approach is to build a road transport system that tolerates human error and minimises casualties following road crashes. The four key elements of the 'Safe System' approach are: 'Safe Road Users', 'Safe Roads' and Roadsides', 'Safe Speeds', and 'Safe Vehicles'. These principles should specifically be applied with the child safety road environment in mind.

Responsibility for the Safe System should be shared by everyone. Policy makers, planners, engineers, vehicle manufacturers, fleet managers, enforcement officers, road safety educators, health agencies and the media are accountable for the system's safety; while every road user, whether they drive, cycle or walk, is responsible for complying with the system's rules.



Key insights

In South Africa, limited research findings exist about the relationship between road safety and town-planning and the effect that this relationship has on child road safety, in particular.

The road environment in South Africa is not completely child friendly yet and more emphasis need to be placed in creating a safer road environment for children. Many environmental risk factors exist that make the road environment unsafe for children, including high traffic volume, a large number of parked cars, multiple lanes of traffic, higher speed limits, decreased visibility, and poor maintenance of street signage.

Children are most often walking to destinations such as schools and other attractions. Apart from being able to walk or cycle safely to school and back home, the residential area itself must also be safe for children because they use the streets for other than school trip purposes as well.

A **walkability audit of residential areas**, assessing the different origins and destinations of pedestrians in the residential areas and the adequacy of walkways, road crossings and other amenities for pedestrians, is a practical tool to provide a safe road environment for children, adult pedestrians and cyclists.

The data suggests that, particularly in rural provinces, learners are more likely to walk all the way to access education (Statistics SA, 2014).

The problem begins at an early age when new learners, from as young as five-years old, begin the **commute to school on their own, unsupervised**. They walk long distances and cross busy roads on their way. Along the route, pedestrian signage may be limited or non-existent and there may be no dedicated pedestrian crossing areas.

In South Africa, vast low-cost housing areas (aka townships) exist in most cities and towns and these areas are, generally, characterised by small erven, leaving very little space for playing. Most often, there are also no public open space or parks provided and, therefore, **children use the streets to play or for social interaction**.

Despite the complexities and challenges of child pedestrian safety, the South African authorities have attempted to address the challenge with policy and legislative responses and also changes in infrastructure. However, they have not managed to adequately address the critical issues that have a causal effect on child pedestrian safety.

In some instances, **contradictions are present in legislative and policy responses**. While these responses have increased, they have not been directly implemented; nor implemented in a way that enforces the prevention of child pedestrian injuries and fatalities. Instead, the responses are largely reactive. More concerted programmes have been devised to support the goal of reducing road fatalities in the 'Decade of Action' between 2010 and 2020.

However, the evidence shows that there has been no significant reduction, but rather a probable increase in injuries or fatalities. While an estimated 70% of all child road users are pedestrians (NHTS, 2013), existing and new roads have not been designed to cater for this particular group.



Recommendations

The complexity of the challenge requires a systems approach which is more holistic and recognises the intersectional nature of the problem. This approach would consider the following:

- Children's safety needs to be a **primary**, and not secondary, planning factor
- **Children's needs should be prioritised** and centralised in road, land and transport planning, both in **urban areas and in rural communities**.
- **National budgets of departments mandated** to address child safety matters, advocacy and road safety education, should be coordinated for greater impact
- The safety of child pedestrians needs to be addressed as a priority. **Planning** should be centred around communicating the role of road users in the safety of children. In addition, **infrastructure for non-motorised transport** should be developed, and environment and education should be prioritised
- Some children may walk for up to an hour a day to access education. The treatment and well-being of **children who walk to access education should be considered**

- **Special focus should be placed on rural areas** where there are few interventions to support a child's safety along major roads, where children are forced to walk in the absence of better, safer alternatives
- The peculiarities of rural and developed areas require different approaches, whether in engineering applications or in providing dedicated scholar transport or bicycles
- **District municipalities** must ensure that their integrated transport plans caters for the need of scholars along the rural road network.
- Co-ordinated and structured collaboration between key stakeholders is critical to facilitate the collection of accurate and timely data to develop evidence-based interventions
- A strategic and **targeted approach to data gathering** should be the conduit for evaluating responsive programmes and areas that are not sufficiently reducing incidents
- The implementation of the National Road Safety Strategy 2016-2030 and related **policies need to be monitored and evaluated closely**, to achieve the desired impact
- **Improved enforcement** of, and appropriate punishment for, contraventions of speed and drink-driving limits, traffic law infringements and hazardous driving
- A particular **area of concern is the behaviour of newly-licensed**, 18-year old drivers with little driving experience and an unrestricted mandate for high-speed driving, while also attaining the legal age to use alcohol legally
- Child safety requires a **co-ordinated approach** between various stakeholders at all levels to achieve the desired change.
- The Child Friendly City and Children First concepts should be adopted by cities to ensure that **children are considered in aspects on city planning and transport**. A Children First focus ensures that transport systems are designed to work for the health, well-being and needs of children. **A core objective is a safe and healthy journey to school for all children**. The measures needed are practical and cost-effective, yet too often they are not in place, particularly for the poorest. Key priorities of this Children First agenda include: ensuring safe routes to school for all children, with walkable pavements, safe road design and effective speed management; prioritising pedestrians and cyclists in urban planning; increasing investments in safe infrastructure for non-motorised transport to encourage active, low carbon, mobility; improving vehicle safety on school journeys with helmets for motorcycle passengers, seatbelts and safety checks for school buses; and also encouraging policies to reduce vehicle emissions and improve air quality.



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