



**CHILD PEDESTRIAN SAFETY INTERVENTIONS:
TOWARDS SOUTH AFRICAN SAFETY PROGRAMME PRIORITIES.**

In South Africa the leading cause of non-natural or injury death to children up to the age of 15 years are pedestrian injury deaths. Pedestrian injuries and fatalities are increasingly concentrated in the 5-9 year, followed by the 10-14 year category. Road accidents costs the economy over R43 billion a year, where 70% of accidents are due to speed and alcohol consumption contributes to nearly 50% of pedestrian and driver accidents. Prevention strategies associated with road traffic injuries remain a serious public health challenge (Arrive Alive, 2005). Child pedestrians are vulnerable road users and collisions involving them often result in fatalities or life-long debilitating injuries.

A number of child pedestrian safety interventions can be implemented to reduce child pedestrian injury-risk within or across all intervention categories:

Intervention Category		Category Description
Road Safety Education		It involves improving pedestrian safety focus, teaching pedestrians road safety skills, and/or the introduction of educational programmes aimed at altering driver or pedestrian behaviour.
Enforcement Interventions		Enforcement interventions refer to those traffic measures that promote road user's adherence to traffic regulations such as regulating driver behaviour, and/or monitoring pedestrian behaviour.
Engineering Intervention	Environmentally-based	Refers to the structural change to the road environment such as pedestrian bridges, pedestrian crossing, speed humps, etc.
	Engineering-design	Refers to the development of safety or injury-reducing products such as retro-reflective clothing, and other visibility aids.
Multi-type Intervention		Include those programmes that consist of two or more interventions in operation simultaneously, complementing each other.

Results indicate the following:

Road Safety Education

- These interventions yield positive child behavioural outcomes, but it must be repeated at regular intervals in order to be effective.
- Are more effective when used in combination with other types of interventions.
- Should focus be allocated to traffic calming (such as mini-roundabouts, speed humps, etc.) and/or enforcement? If so, there would be fewer child pedestrian hospitalisations.

Environmentally-based engineering interventions

- Promising interventions include roadway barriers, traffic-calming designs, pedestrian crossing signs
- It is generally agreed that these measures were effective in reducing traffic speeds and the incidence of child pedestrian injury and/or death.
- This measure also reduces children's daily exposure to highly congested roads or areas, with the provision of walking pathways.



Multi-type Intervention

- These types of programmes are most interactive and mainly involve community participation to assist with its sustainability.
- They often reduce road risky behaviour on the part of the motor vehicle driver and pedestrian; promote road safety behaviours; reduce driver motor vehicle speeds; create safer environments (such as the set of playgrounds for children); and it reduces child road injury-risk.



Enforcement Interventions

- A variety of enforcement measures are considered suitable and sustainable for implementation in reducing drivers speed and consequently contributing to the reduction of child pedestrian injury and/or death.
- Successful enforcement measures mainly comprise speed enforcement detection devices and red-light cameras.
- Speed enforcement detection devices are fairly consistent and reliable in reducing motor vehicle crashes.



Engineering-design

- Retro-reflective clothing were emphasised as the most effective engineering-design measurement for pedestrian utilisation
 - Especially during the evening and night when lighting conditions were low
- With the use of education and enforcement this intervention can be implemented quite effectively, especially in high risk areas/roads/highways.

Conclusion

- The international literature predominates in the educational, community-based and engineering interventions.
- Within South Africa the educational and community interventions are the minority, more attention paid to engineering interventions.
- Internationally, both governmental, and non-governmental organisations are involved among all the different types of interventions across all categories.
- Whereas within South Africa the interventions in use predominantly depend on partially governmental funded organizations and non-governmental organizations sponsorship from the government to carry out investigations.

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