

SPEED LEVEL AT ACCIDENT LOCATIONS VERSUS SEVERITY OUTCOME FOR HIT PEDESTRIANS AND BICYCLISTS

PRELIMINARY RESULTS



Höskuldur Gudjonsson, Traffic and roads, Department of technology and society, Lund University, Sweden, hoskuldur.gudjonsson@tft.lth.se

Objectives

This study is aimed at analysing the relationship between the speed level at accident locations and the severity outcome for pedestrians and bicyclists who were hit by a motorized vehicle.

Method

Speed measurements were carried out to determine the prevailing speed level at accident locations in southern Sweden (Skåne). These locations are categorized based on age of the pedestrian/bicyclist and how severe the injuries were. Then statistical analysis was made to study how those factors are related to each other.

Results

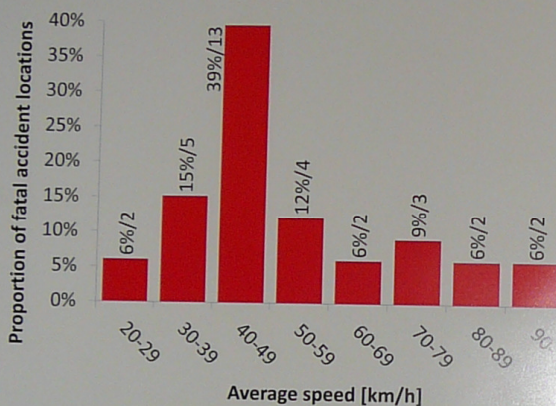


Figure 1: Distribution of fatal accidents by average speed



relationship between speed, age and severity

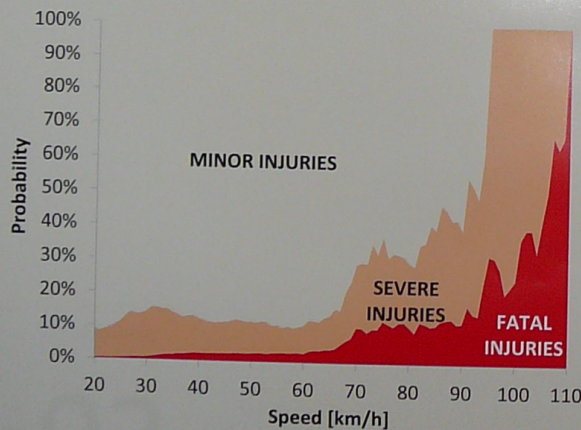


Figure 3: The probability of injury severity as a function of speed level at the accident site

Conclusions

- Most fatal accidents occur on sites with average speed lower than 50 km/h.
- There is a strong relationship between the speed level at the accident location and the severity outcome of accidents between pedestrians/bicyclists and motorized vehicles.
- The age of the pedestrian/bicyclist is decisive for how severe the injuries will be
- The number of accidents is highly dependent on exposure, i.e. whether there are frequent interactions between pedestrians/bicyclists and motorized vehicles. This means that a large number of the severe and fatal accidents occurred in low speed environments even though the risk of fatality is low in that environment.

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