Abstract

In this exploratory study we investigated to which extent introduction of a more detailed accident coding can enhance the usefulness of accident databases. We manually examined all serious or fatal injury accidents records involving cyclists during 2009-2013 in two cities in Sweden.

Totally 243 accidents were manually examined. Results indicate that the suggested classification does provide a more versatile view of the cyclist safety problems. However, the result also showed a large amount of single accidents (60%) and for these accidents, a distinct lack of details heavily limits the use of detailed accident coding.

Conclusions

• The majority of the cyclist accidents (60%) were single accidents, registered by hospitals only.

• Hospital data contribute a lot to understanding the extent of the safety problems, but not as much to understanding the conditions of the accidents.

• Accident classification similar to CADaS provides much more versatile view of the cyclist safety problems compared to STRADA.

• However, going into more disaggregation quickly results in very few accidents per type and become meaningless.

• Some details of the accident, such as sight obstructions, can be difficult to ascertain based the information provided by the police.

STRADA

(Swedish Traffic Accident Data Acquisition)

STRADA, the Swedish national accident database, contain accident records from both the police and from hospitals. Each accident is reported separately by the police and hospitals and is later combined in STRADA. However, some accidents are only reported only by police or only by hospitals leading to a lack of overlap between police and hospital records.

CADaS

(Common Accident Data Set)

CADaS consists of a set of standardized data elements that are included into the CARE database in order to allow for better comparisons between European countries.

CADaS also includes a set of accident codes that provide information about the manoeuvre type that lead to the accident. Similar information are also used in the German and Danish accident databases.

Method

We created an accident code that included a set of accident types based on CADaS enhanced with very specific details about the accident such as road markings, regulation, sight conditions, etc.

We then manually examined all serious or fatal injury accidents records in STRADA involving cyclists & pedestrians during 2009-2013 in the cities of Gothenburg and Malmö (2nd and 3rd biggest cities in Sweden).