

SafetyCube

Serious road traffic injuries in Europe: Lessons from SafetyCube

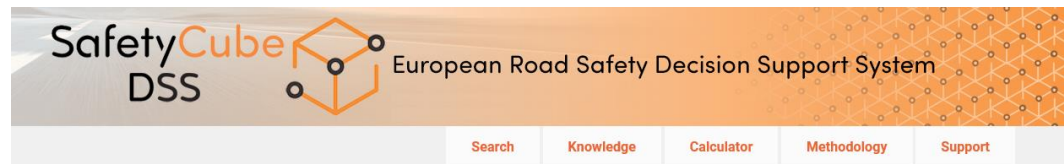
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SafetyCube

- Aim: develop an innovative road safety Decision Support System (DSS): <https://www.roadsafety-dss.eu/>
- Quantitative information on road safety risk factors and measures



The SafetyCube DSS is the European Road Safety Decision Support System, which has been produced within the European research project SafetyCube, funded within the Horizons 2020 Programme of the European Commission, aiming to support evidence-based policy making. The SafetyCube Decision Support System provides detailed interactive information on a large list of road accident risk factors and related road safety countermeasures. A Quick Guide on using the SafetyCube DSS, with instructions on how to browse the system, make a search and further refine the results, is available for download [here](#).



Serious road injuries



- Road safety policy making was mainly aimed at reducing fatalities, but
- Serious road injuries are getting more attention in recent years



SafetyCube – Serious road injuries

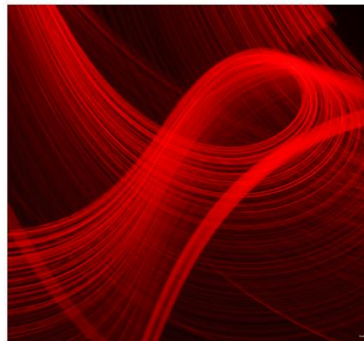


Serious injury = MAIS3+

- Estimation of the number of serious road injuries
- Health impacts of serious road injuries
- Cost related to serious road injuries
- Risk factors associated with serious road injuries



Estimation of the number of serious road injuries



Practical guidelines for the registration and monitoring of serious traffic injuries

Deliverable 7.1



The image shows four pages of a document. The top-left page is the title page, which includes the title 'Practical guidelines for determining the number of serious road injuries (SRIs)', a SafetyCube logo, and a decorative red line graphic. The top-right page is the 'Recommendations' section, which lists key points for data collection and reporting. The bottom-left page is the 'Getting access to hospital data' section, which discusses the challenges and solutions for obtaining hospital data. The bottom-right page is the 'Further information' section, which provides additional resources and references. The document is presented in a grid layout with a white background and orange accents.

Introduction

- EU High Level Group on Road Safety identified three main ways to collect data on MAIS₃₊ casualties:
 1. *Applying correction to police data*
 2. *Using hospital data*
 3. *Using linked police and hospital data*
- Additional choices need to be made
- Methodological choices have an effect on the estimated number of MAIS₃₊ casualties

Method



- Description of current and planned practices
 - *Survey among EU countries (inspired by FERSI survey)*
 - *Current practices and experiences from number of countries*
- Analysis of consequences methodological differences;
 - *Application of different methods to the same data*

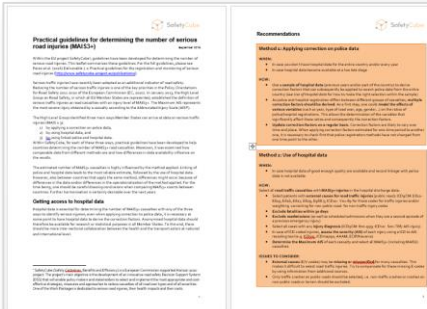
→ Practical guidelines

Results

- Methods differ between countries
- Methodological differences can have a considerable effect on the estimated number



Practical guidelines for the registration and monitoring of serious traffic injuries
Deliverable 7.1

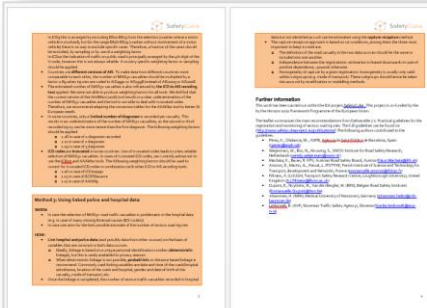


Practical guidelines for determining the number of serious road injuries (MALS1)

Recommendations

Method 1: Applying correction to public data

Method 2: Use of hospital data



Method 3: Using linked police and hospital data

Further information

Health impacts



Physical and psychological
consequences of serious road
traffic injuries

Deliverable 7.2



Introduction & method



Physical and psychological
consequences of serious road
traffic injuries

Deliverable 7.2



- Impacts of (serious) road injuries on lives of casualties
 - *Literature review*
 - *Analysis of additional studies and data, e.g. ESPARR cohort study*



- Burden of (serious) road injuries to society → YLD
 - *Literature review*
 - *Calculation of YLD for a number of countries*

Results (1)



Physical and psychological
consequences of serious road
traffic injuries

Deliverable 7.2

- Non-fatal road injuries can have a major impact on lives of casualties (and their families):
 - *Pain, fatigue, mobility problems, sick leaves*
 - *Psychological consequences, e.g. PTSD*
 - *Socio-economic consequences, e.g. financial problems*
- Reported prevalence of disabilities varies widely between studies (11% - 80%)

Results (2)



Physical and psychological
consequences of serious road
traffic injuries

Deliverable 7.2



- YLD calculations: between 19% and 33% of MAIS₃+ casualties encounter lifelong disabilities
- Consequences increase with injury severity, but:
 - *Also minor injuries may have substantial long-term consequences*
 - *Because of their high number, the burden of injury of MAIS₂-injuries is higher than the burden of injury of MAIS₃+ injuries*

Costs related to serious road injuries



Costs related to serious road injuries

Deliverable 7.3



Method & Results



- Survey among 32 EU countries
 - *Joint effort between SafetyCube and InDeV*
- Costs per serious road injury: €28,000 - €975,000
- 14% - 77% of total costs of road crashes
- 0.04% - 2.7% of GDP

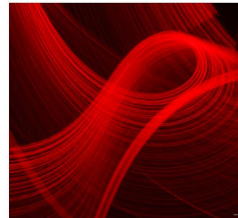


Costs related to serious road injuries

Deliverable 7.3



Main lessons learned from SafetyCube



Practical guidelines for the registration and monitoring of serious traffic injuries

Deliverable 7.1



Physical and psychological consequences of serious road traffic injuries

Deliverable 7.2



Costs related to serious road injuries

Deliverable 7.3



Main lessons



1. Be careful when comparing MAIS₃₊ estimates from different countries
2. Good quality hospital data is inevitable for the estimation of the number of MAIS₃₊ casualties
3. As AIS₃₊ injuries can have major impacts on casualties' lives, pose a burden to society and result in considerable costs, it is important to reduce the number of MAIS₃₊ casualties
4. From a burden of injury perspective, less serious injuries are as relevant as serious injuries

Thank you!



<http://www.safetycube-project.eu/>

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