SafetyCube

Serious road traffic injuries in Europe: Lessons from SafetyCube

Wendy Weijermars (SWOV)

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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

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+

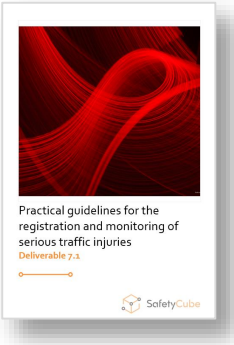
- **Estimation of the number of serious road injuries**
- **Health impacts of serious road injuries**
- **Cost related to serious road injuries**
- Risk factors associated with serious road injuries

Estimation of the number of serious road injuries

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

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*

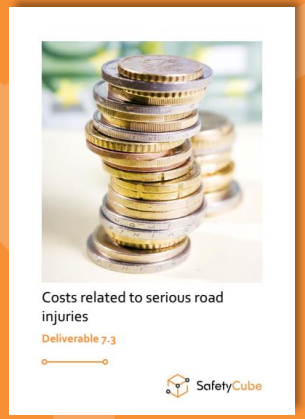
Costs related to serious road injuries

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

Main lessons learned from SafetyCube



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/

The team
Weijermars, W., Bos, N., Houwing, S. & Wijlhuizen, G.-J. (SWOV), Netherlands
Pérez, K., Olabarria, M., Duran, X. (ASPB), Spain
Machata, K., Bauer, R. (KFV), Austria
Amoros, E., Martin, J.-L., Pascal, L., Hours, M. (IFSTTAR), France
Filtness, A., Reed, S., Thomas, P. , Brown, L., Barnes, J. (Loughborough University), UK
Dupont, E., Nuyttens, N., Meunier, J.-C., Van den Berghe, W. , Schoetens, A. (BRSI), Belgium
Johannsen, H. , (MHH), Germany
Leskovsek, B. (AVP), Slovenia