SafetyCube

Serious road injuries

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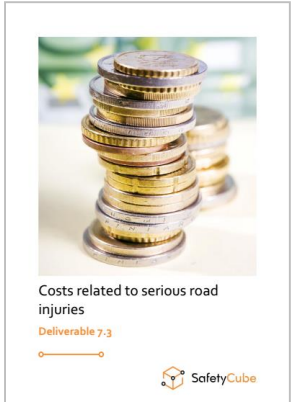
Introduction

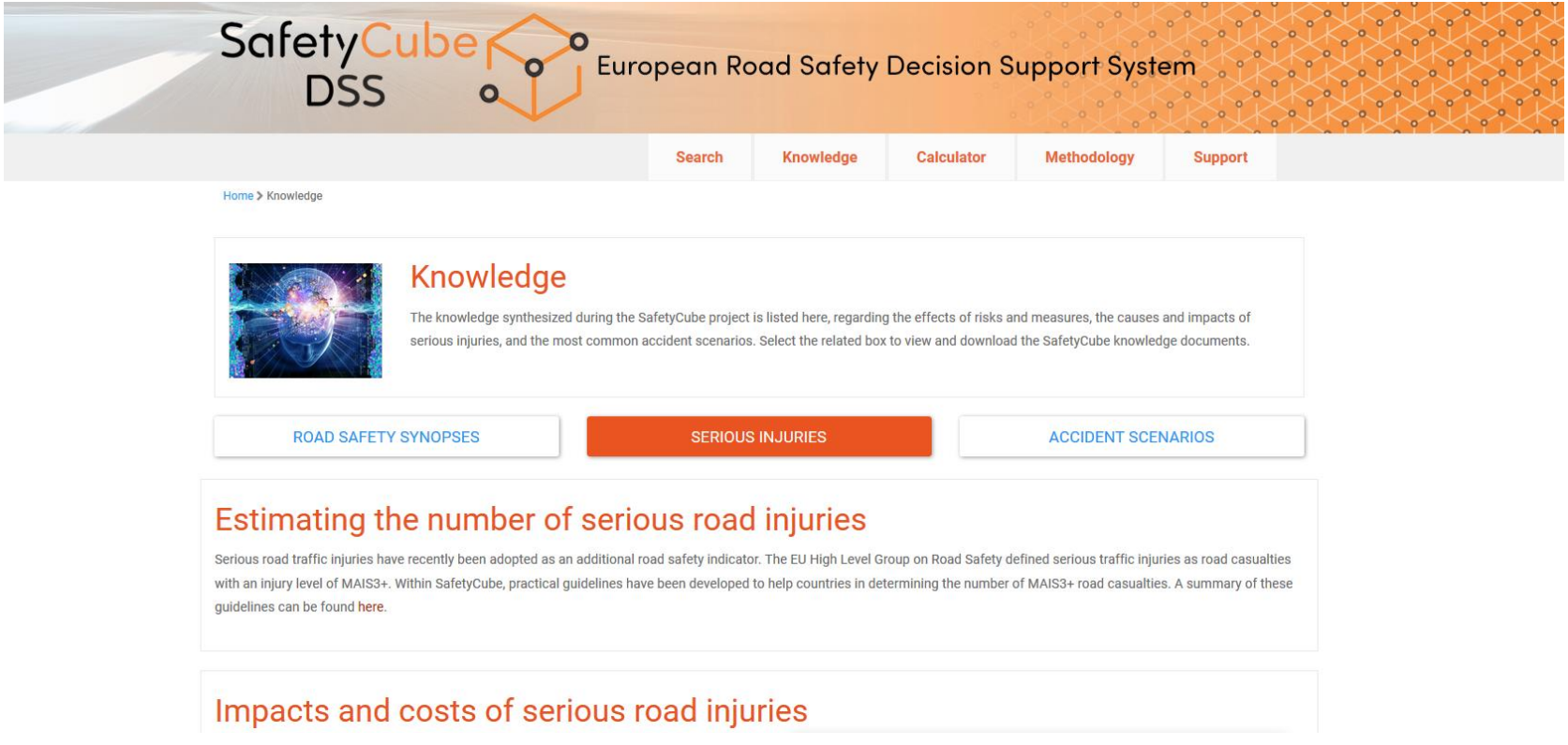
- Serious road injuries are increasingly being adopted as an additional road safety performance indicator
- EU definition (2013): non-fatal road traffic casualty with an injury severity level of **MAIS3+**
- All EU member states are asked to provide data from 2014 on, by:
  1. *Applying correction factors to police data*
  2. *Using hospital data*
  3. *Using linked police and hospital data*

Serious injuries in SafetyCube

- Estimation of the number of MAIS3+ casualties
- **Consequences of serious road injuries**
- Costs related to serious road injuries
- Risk factors associated with serious road injuries



Serious injuries in the DSS



Consequences of serious road injuries

Physical and psychological consequences of serious road traffic injuries

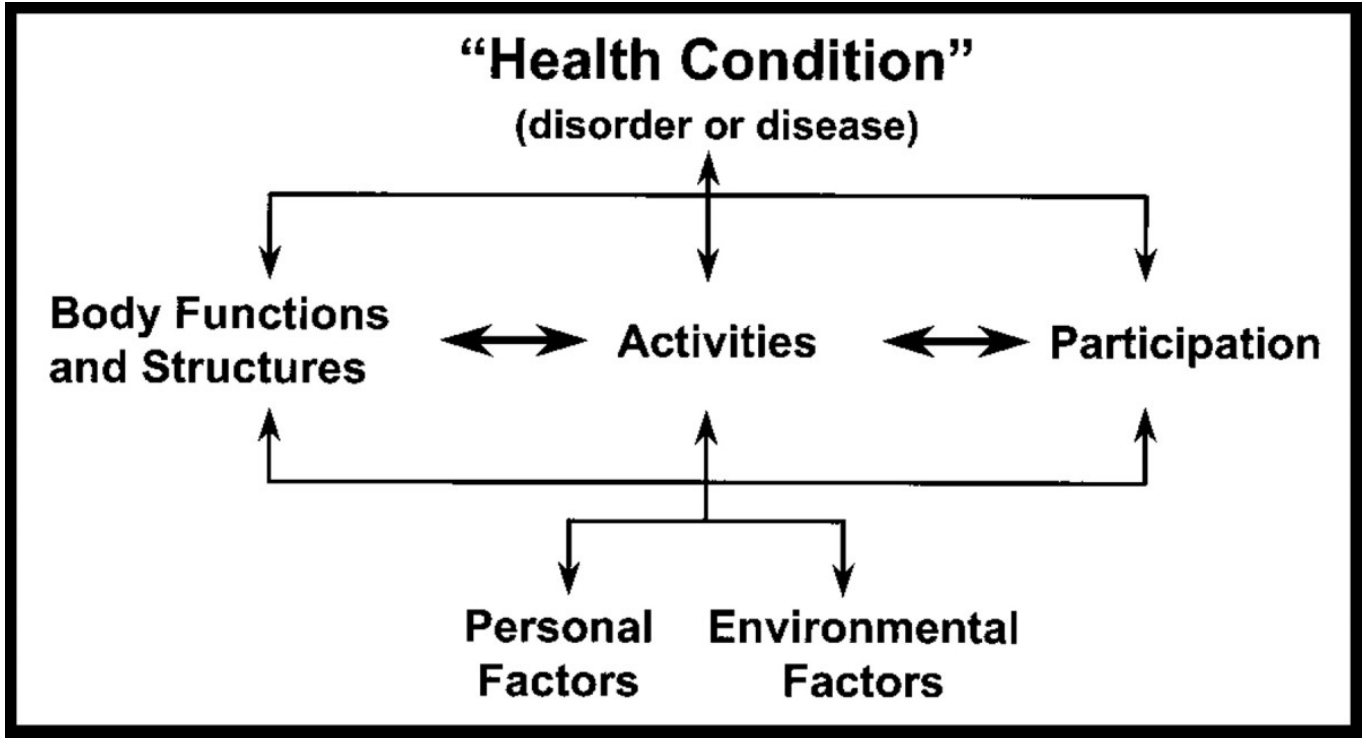
Deliverable 7.2

Introduction & method

- Impacts of (serious) road injuries on lives of casualties
  - *Literature review*
  - *Analysis of additional studies and data*

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

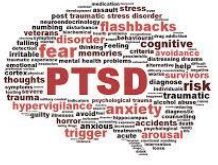
Impacts for individual casualties



ICF framework (*http://www.who.int/classifications/icf/icfbeginnersguide.pdf?ua=1*)

Results (1)

- 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 prevalance of disabilities varies widely between studies (11% - 80%), depending on for example time period, types of disabilities and casualties taken into account

Results (2)

- Consequences vary in time and between casualties:
  - *Age, gender, socio-economic status, comorbidity*
  - *Treatment in the hospital, compensation process*
  - *Injury (severity)*

- Injury (severity):
  - *In general more severe injuries have a higher impact, but also minor injuries can have high impacts*

Burden of injury

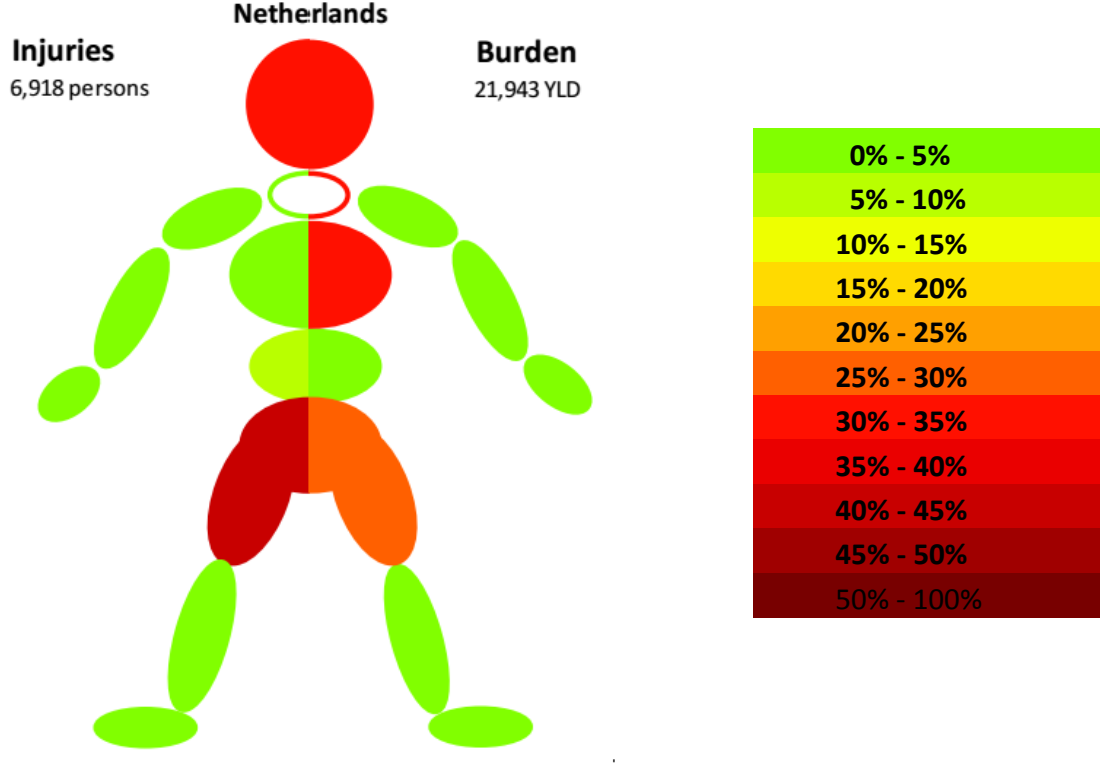
- Health burden: Disability Adjusted Life years (DALYs)
  - *YLL: years of life lost*
  - *YLD: Years lived with Disability*

- YLDs are calculated for Austria, Belgium, England, Netherlands, Rhône region and Spain, applying the INTEGRIS method (Haagsma et al, 2012)

Burden of injury – results (1)

- Average burden per casualty: 2.8 YLD (2.4 – 3.2)
- 90% of YLD due to lifelong disabilities that are encountered by 19% (Spain) to 33% (Netherlands) of MAIS3+ casualties
- Average burden per casualty differs between type of injury, transport mode, age and gender

Burden of injury – results (2)



Burden of injury – results (3)

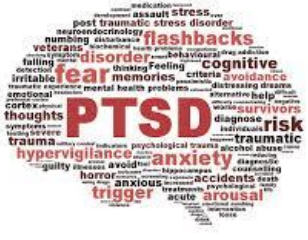
- Burden of injury differs between countries due to
  - *Differences in age distribution of casualties*
  - *Differences in distribution over EUROCOST injury groups*

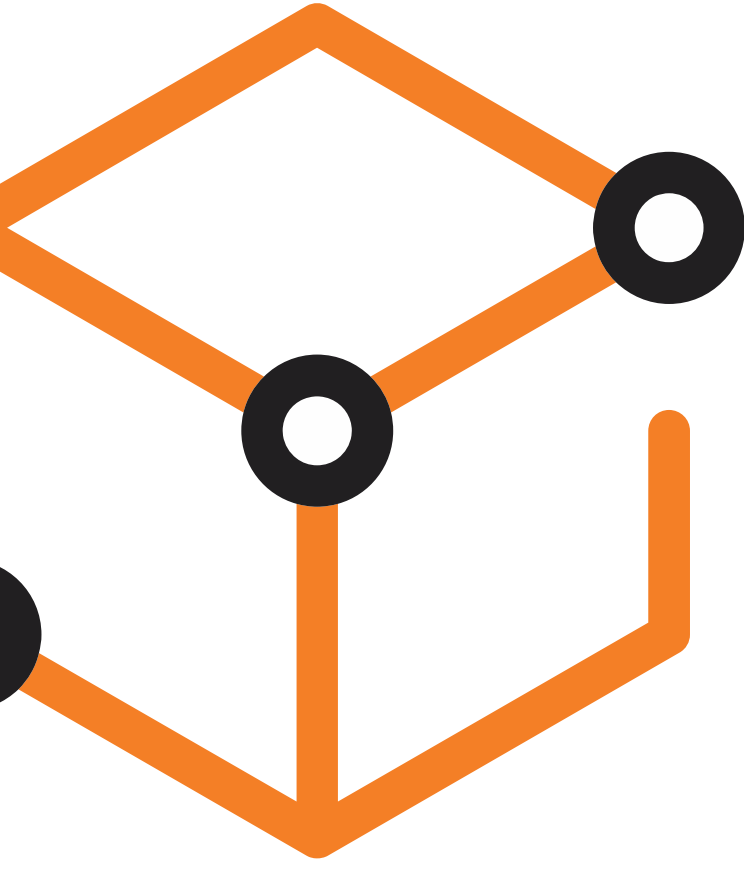
→ Be careful with translating results to other countries/ Europe in general

- MAIS3+ casualties are responsible for less than half of the total burden of non-fatal road traffic injury

Conclusion

Non-fatal road injuries can have a major impact on lives of casualties (and their families) and pose a burden to society





Thank you

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