

WP.1 guidance for Improving Road Safety by use of alternative measures showing the long term burden of road traffic injuries on global public health

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A public health approach to prevention

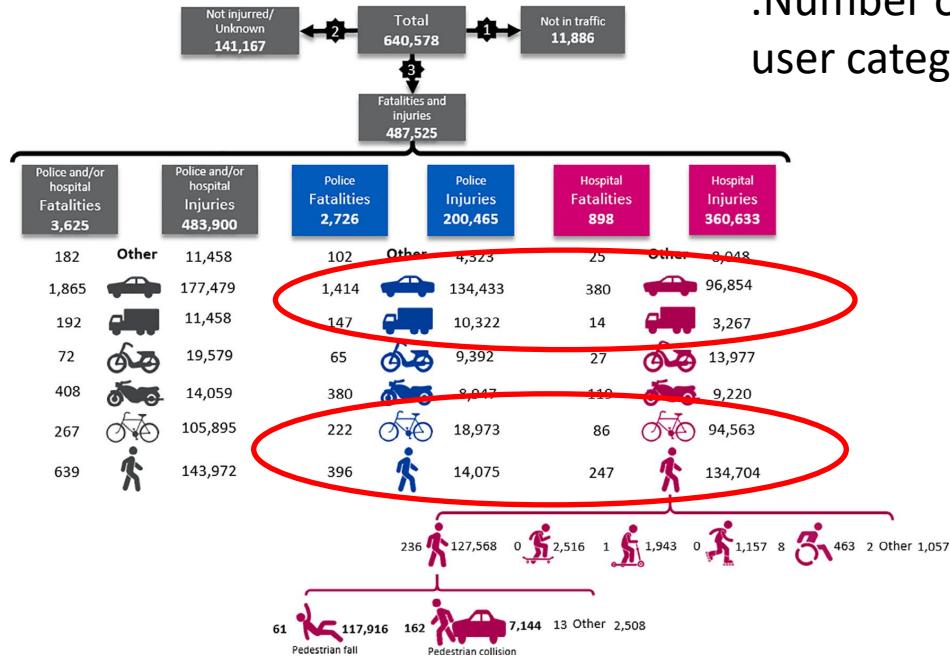
- 1) define the problem,
- 2) identify risk and protective factors,
- 3) develop and test prevention strategies and
- 4) assure wide spread adoptions

But what is the problem and how to measure it....?

Many measures with different purpose

- Number of fatalities
- Description and diagnosis of injuries and diseases
 - International Classification of Diseases (ICD)
- Classifying the trauma, injury severity and body part(s)
 - Abbreviated Injury Scale (AIS, MAIS, ISS)
- Long term consequences of an accident/injury
 - International Classification of Functioning and Disease (ICF)
 - Functional Capacity Index (FCI)
 - Disability and Quality Adjusted Life Years (DALY or QALYS)
 - Permanent medical impairment (PMI)
 - Time to recover to going back to work
 - Loss of Quality of life (QoL or HRQoL)

Decided use of data source(s) will/can show different problem(s)



.Number of fatalities and injured by road user category, 2010–2019, STRADA

Amin, K., Skyving, M., Bonander, C., Krafft, M., & Nilson, F. (2022). Fall- and collision-related injuries among pedestrians in road traffic environment - A Swedish national register-based study. Journal of Safety Research. Volume 81, June 2022, PP. 153-165.

<https://doi:10.1016/j.jsr.2022.02.007>



“Threat-to-life”

AIS (Abbreviated Injury Scale)

1971, updated several times, latest 2015

Injuries are categorized by nine different body parts and it's severity.

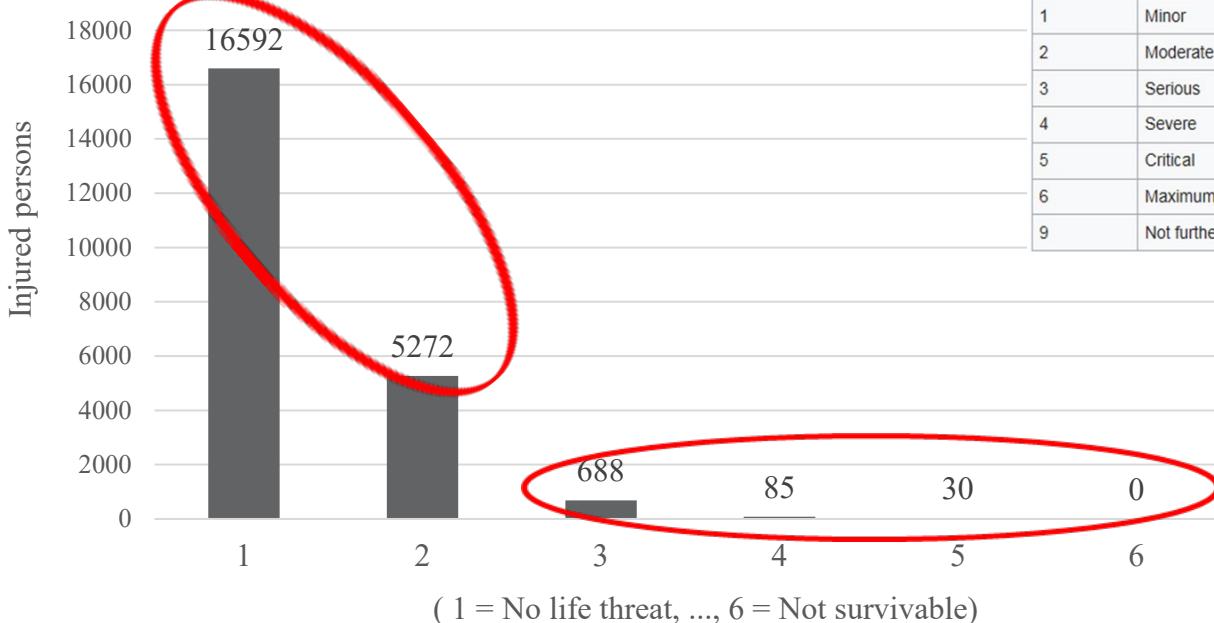
Abbreviated injury Score				
AIS-Code	Injury	Example	AIS % prob. of death	
1	Minor	superficial laceration	0	
2	Moderate	fractured sternum	1 – 2	
3	Serious	open fracture of humerus	8 – 10	
4	Severe	perforated trachea	5 – 50	
5	Critical	ruptured liver with tissue loss	5 – 50	
6	Maximum	total severance of aorta	100	
9	Not further specified (NFS)			

MAIS (Maximum AIS)

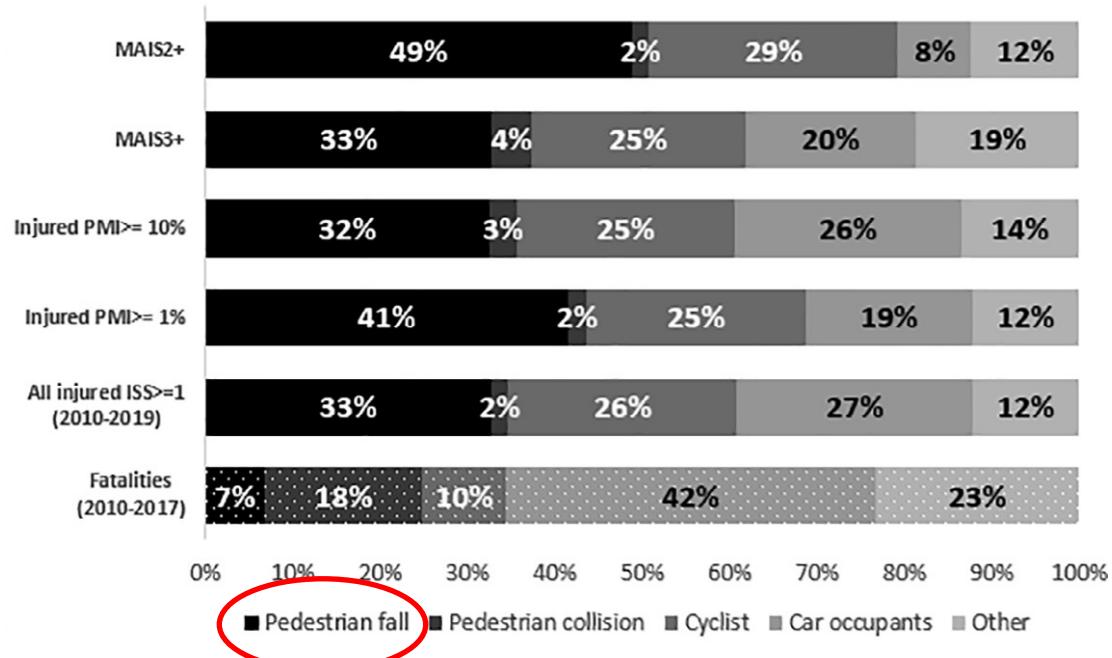
The highest AIS-score

Number of injured persons by MAIS in Strada, 2018

The prevention paradox



Introducing a new type of road traffic injury will change the problem – "pedestrian fall"

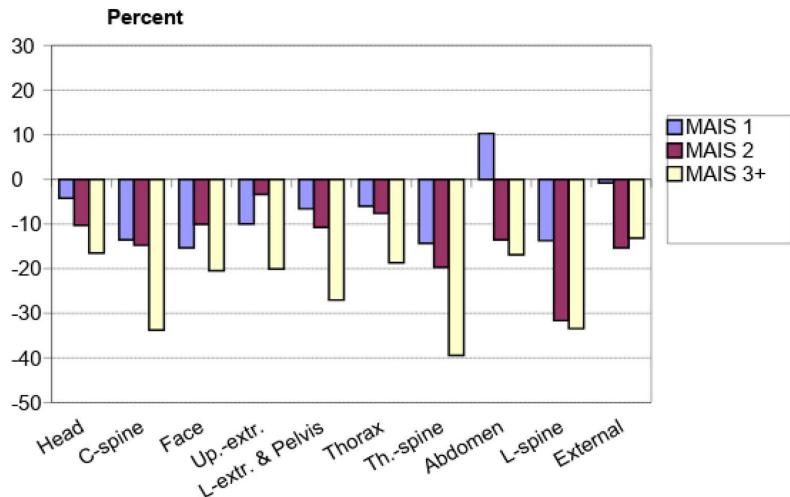


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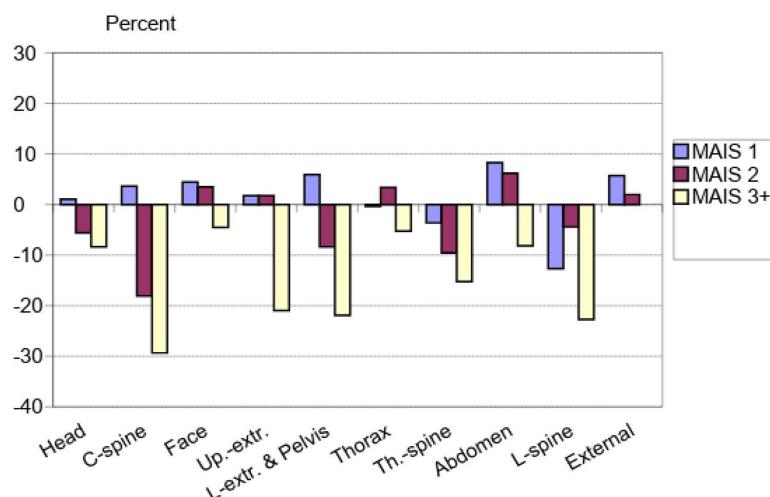
Using loss of quality of life give another picture of the problem

Percental difference in HRQoL, divided by MAIS and injured body part compared to a reference group, represented by 0%

Females



Males



WP.1 are invited to discuss:

- What perspective should WP.1 have towards long-term burden of road traffic injuries as contribution to the global public health?
- If and how to further elaborate with alternative measures and related needed policies?
- Gender, regional etc. differences?