

# Road traffic accidents statistics

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**European Commission**



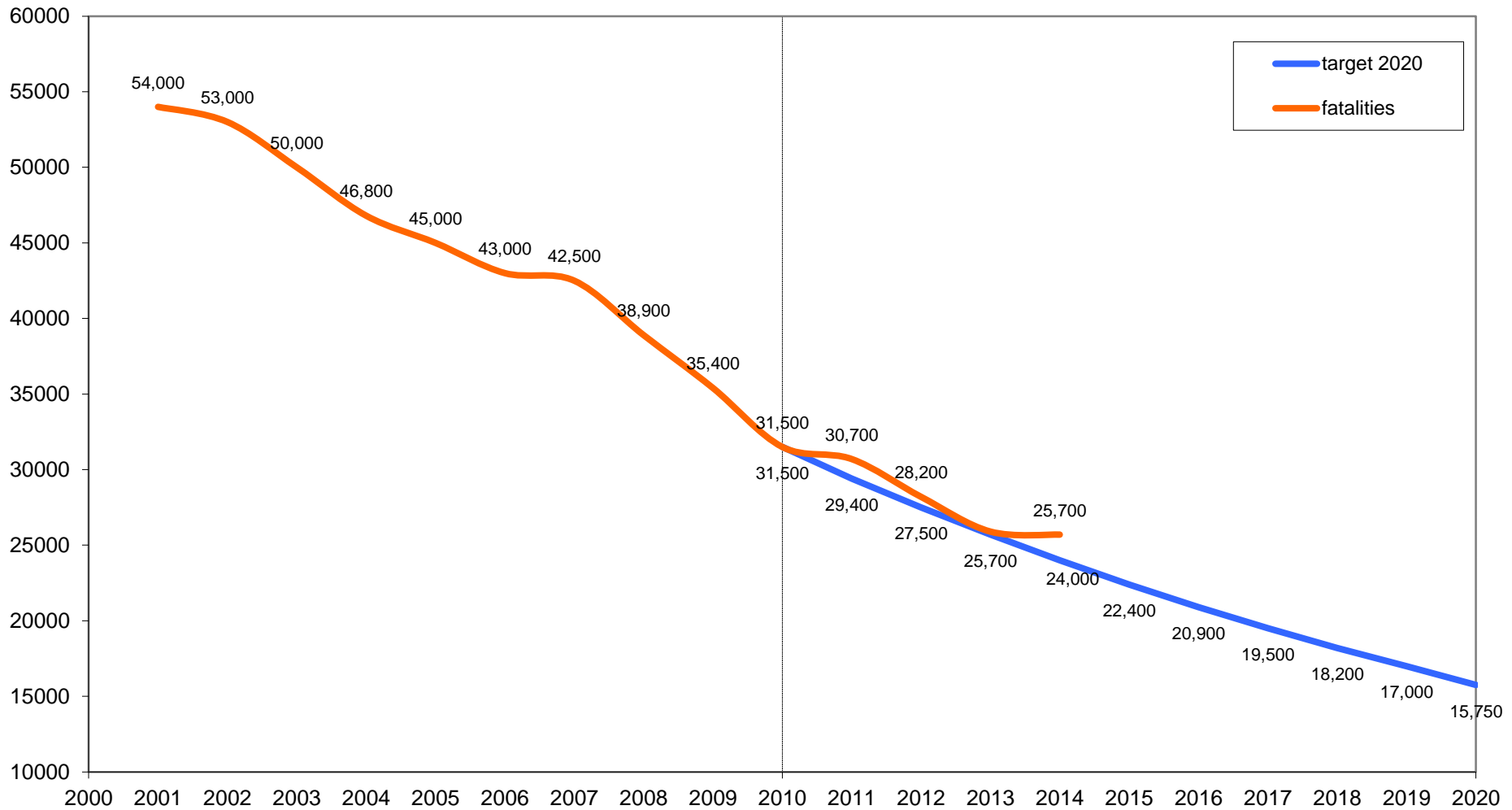
# The “-50%” objective

- **A political & global commitment**
- **- 43% achieved ( 2001 – 2010)**

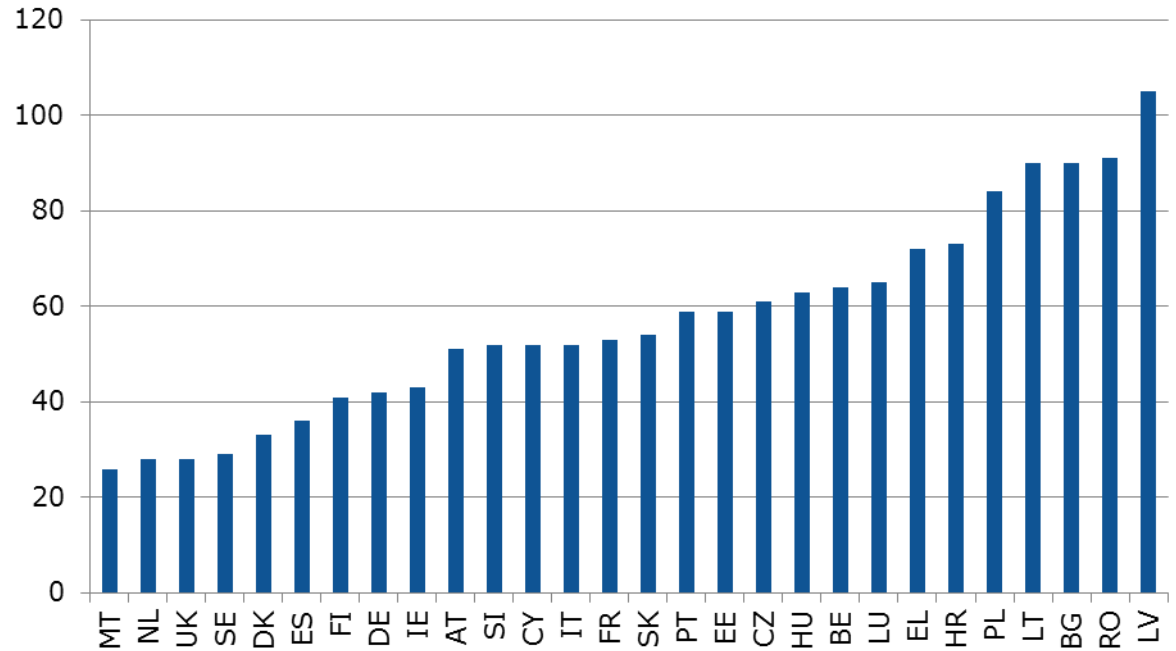
# Victims and accidents 2001 - 2010

- - 43% on fatalities
- - 36% on seriously injured
- - 26% on injured
- - 24% on accidents

# EU fatalities



# Fatality rates 2014 (deaths/million inhabitants)



# A target for reduced number of road deaths

- **First target 2001-2010: almost reached!**
- **Second target 2011-2020**
- **Long-term: Vision Zero**
- **Strategic, aspirational, not legally binding**
- **International best practice: transparency, benchmarking and comparisons, mobilising actions**

# **A strategy to reduce number of serious injuries**

- **Serious injuries decrease less than fatalities; higher number of injured than killed on the roads**
- **A common EU definition: MAIS+3**
- **Data collection – how?**

# Evaluation at half-time: will the target be reached?

- **Framework and target remain relevant; EU has contributed to outcomes**
- **7.8% annual fatality reduction now needed: challenging but not impossible**
- **Actions needed on EU and Member State level; more attention to vulnerable road users**
- **Fatality target only addresses part of road safety problem**

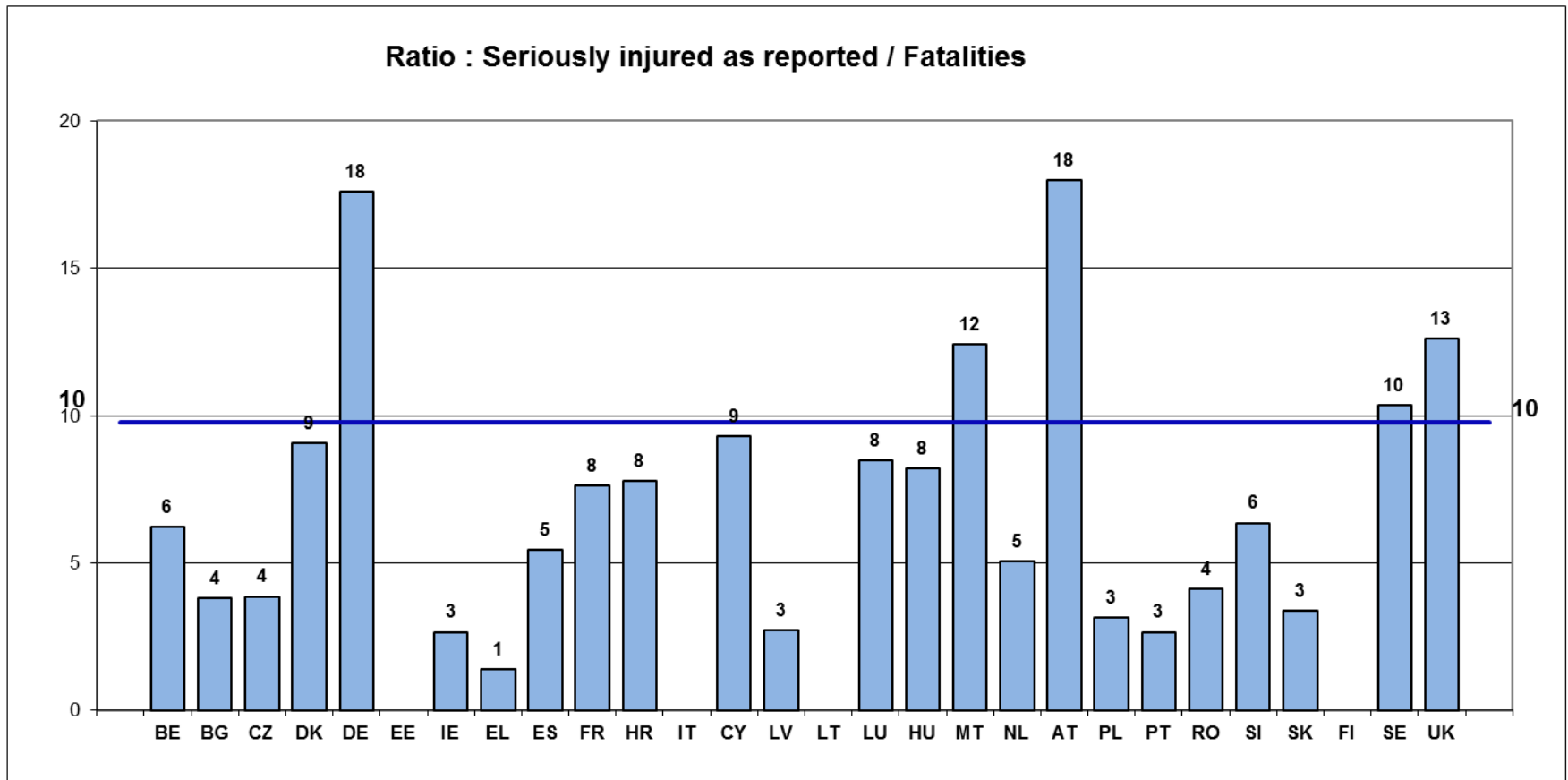


# Common definition by police

**Seriously injured : no based on medical  
diagnosis**

**at least 24 hours at the hospital**

# Big differences between countries



# New Common definition

**Seriously injured : based on medical diagnosis**

**MAIS3+**

# **AIS - Abbreviated Injury Scaling**

**Abbreviated Injury Score © – copyright by AAAM**

**AAAM - ASSOCIATION FOR THE ADVANCEMENT  
OF AUTOMOTIVE MEDICINE**

**Dedicated to limiting injuries from motor vehicle crashes**

## What is AIS ?

Severity assignment assumes single injury  
Consensus based

Multiple dimensions of severity

Threat to life

Tissue injury

Cost

Length of stay

Temporary or permanent impairment/disability

## What is AIS ?

**Internationally accepted scale for injury severity scoring**

**Based on anatomic disruption**

**Internationally accepted standard for describing severity of injury**

**Abbreviates description of injury severity to a number**

**1 = minor**

**2 = moderate**

**3 = serious**

**4 = severe**

**5 = critical**

**6 = maximal**

**(9 = unknown)**

## Description of the AIS and MAIS

The Abbreviated Injury Scale (AIS) severity score is on an ordinal scale of 1-6, with one indicating a minor injury and six being maximal (currently untreatable). An AIS code of 9 is used to describe injuries where not enough information is available for more detailed coding. The maximum AIS (MAIS) indicates the most severe injury that a patient sustains.

## **AIS codification**

**Direct codification on hospital registry from experts  
using AIS dictionary**

**Conversion from ICD codes to AIS  
using mapping table**

**The decision remains to each country**



# Contract with AAAM

(Association for the Advancement of Automotive Medicine)

*AAAM has developed and is the owner and licensee of injury coding products including the AIS2005 update-2008 code and the AIS coding manual/DVD. All individuals using the AAAM injury coding products in this project agree that they will use the given product only for use in this project and not for their own or institution's purposes unless they have a separate license agreement with AAAM.*

## Contract with AAAM

*Two different mappings for International Classification of Diseases (ICD) versions 9 and 10 into the code 3+, <3, or indeterminable.*

# ICD9 Mapping

*2.500 records*

		1 = AIS 3, 4, 5, 6 0 = AIS 1,2 9 = cannot determine
CODE	DESCRIPTION	
800	Fracture Of Vault Of Skull	0
800.0	Closed Fracture Of Vault Of Skull Without Mention Of Intracranial Injury	0
800.00	Closed fracture of vault of skull without mention of intracranial injury; unspecified state of consciousness	0
800.01	Closed fracture of vault of skull without mention of intracranial injury; with no loss of consciousness	0
800.02	Closed fracture of vault of skull without mention of intracranial injury; with brief [less than one hour] loss of consciousness	0
800.03	Closed fracture of vault of skull without mention of intracranial injury; with moderate [1-24 hours] loss of consciousness	1
800.04	Closed fracture of vault of skull without mention of intracranial injury; with prolonged [more than 24 hours] loss of consciousness and return to pre-existing conscious level	1

# ICD10 Mapping

*16.500 records*

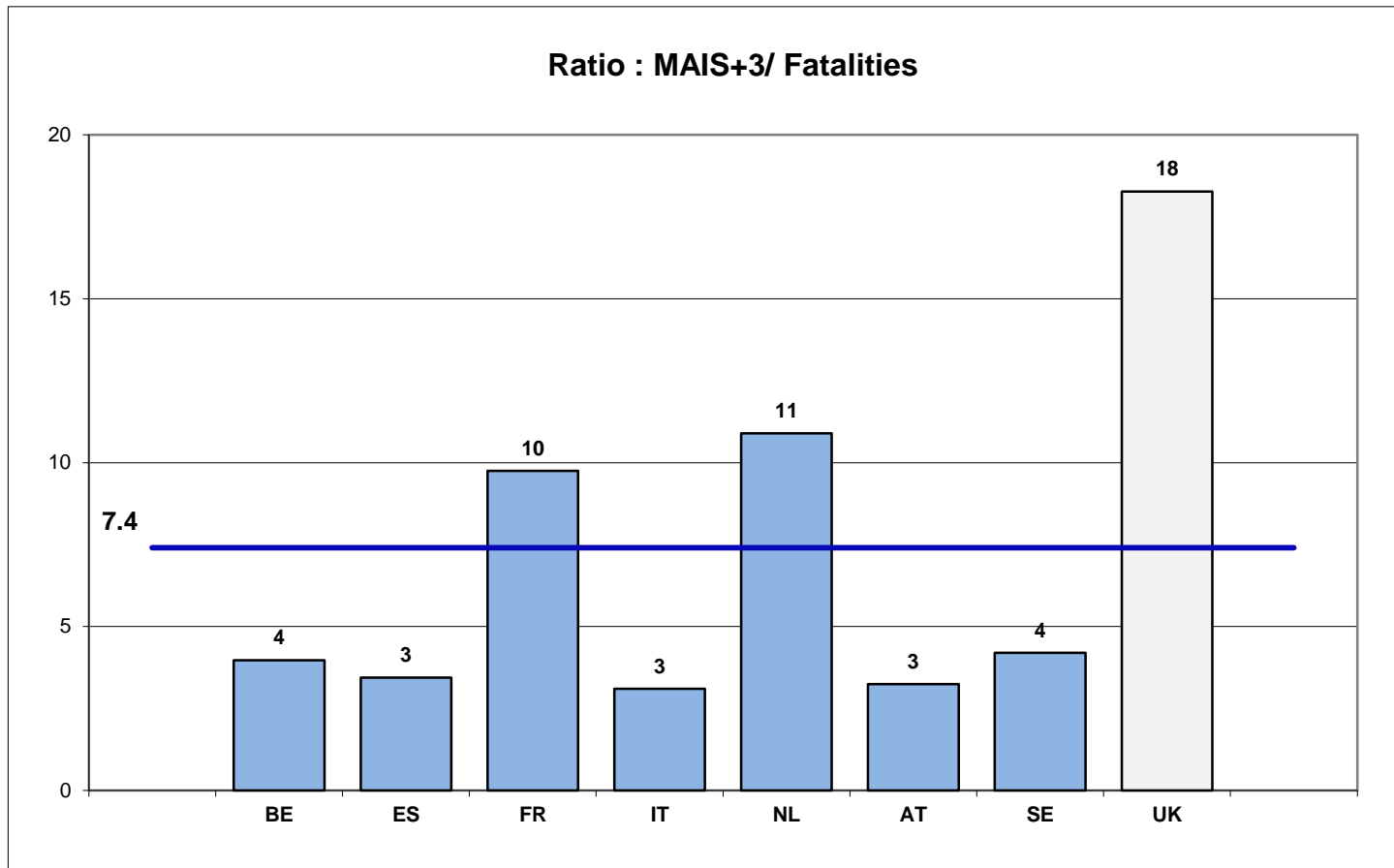
Code	Description	1 = AIS 3, 4, 5, 6 0 = AIS 1,2 9 = cannot determine
S00.	Superficial injury of head	0
S00.0	Superficial injury of scalp	0
S00.00	Unspecified superficial injury of scalp	0
S00.01	Abrasion of scalp	0
S00.02	Blister (nonthermal) of scalp	9
S00.03	Contusion of scalp	0
S00.04	External constriction of part of scalp	9

# How to use IAS mapping

## Hospital discharges datafile

- National
- Representative sample

# Sample of countries



# How to use IAS mapping

## Hospital discharges datafile

- National
- Representative sample

# How to use IAS mapping

## Traffic data

- Subset of traffic accidents
  - By specific code or payment code ( insurance ...)
- Only admissions from Emergency room
  - To avoid doble counting



# How to use IAS mapping

## Extract ICD codes

- Convert to IAS
- Calculate MAIS by person

# How to use IAS mapping

Calculate totals

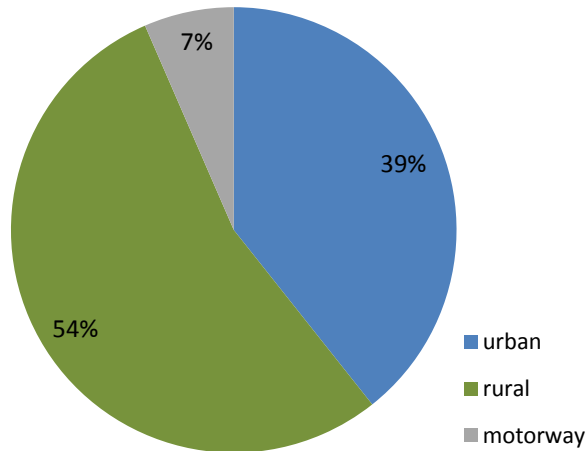
- MAIS < 3
- MAIS 3 or +

# Research

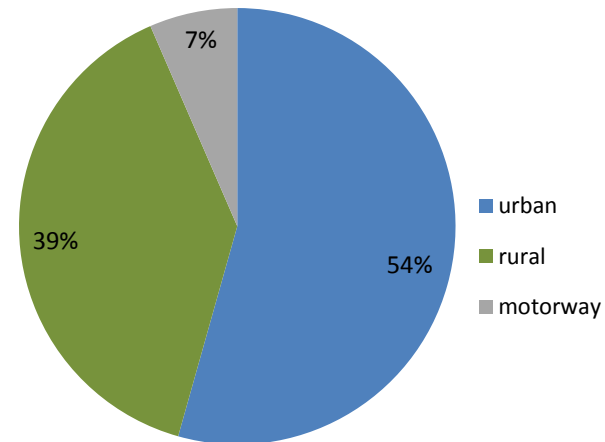
H2020 Safetycube project

# New target > new focus

## Fatalities



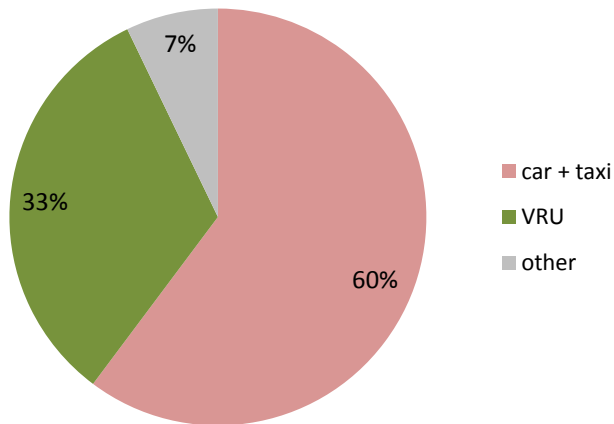
## Seriously injured



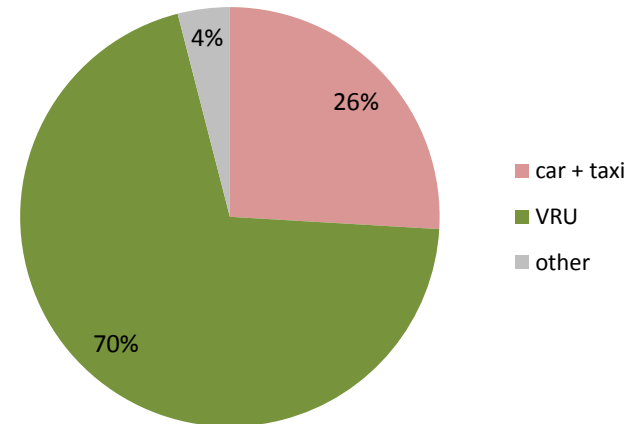
# New target > new focus

## From passenger cars to VRU

Fatalities on rural areas



Seriously on urban areas





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## ROAD SAFETY

European Commission > Transport > Road Safety



MOTORCYCLING INTO THE 21ST CENTURY  
OCTOBER 3rd - COLOGNE, GERMANY



### USERS

- Children
- Cyclists
- Elderly drivers
- Motorcyclists and mopeds users
- Novice drivers
- Pedestrians
- Professional drivers



### TOPICS

- Behaviour
- Infrastructure
- Vehicles
- Dangerous goods
- Questions and Answers
- Public consultations



### SPECIALISTS

ENGLISH ONLY

- EU road safety policy
- Road safety knowledge base
- Projects
- Statistics
- Toolbox (Manuals and best practices)
- Fundings



#### What's new

#### Publications

Second European Motorcyclists' Forum - 03/10/2012  
14/09/2012

Call for proposals with a view to obtaining grants in the field of road safety for the organisation of a youth forum for road safety (DG MOVE/C4/SUB/01-2012) – English only

05/09/2012

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### STATISTICS

The EU publishes various statistics and other data on road safety



More

### GOING ABROAD

Traffic rules at a glance



Mobile version

More

### USEFUL LINKS



Policy orientations on road safety 2011-2020  
[ 737 KB ]



European Road Safety Charter



Road Safety Knowledge Base



Driving licence

<http://ec.europa.eu/roadsafety>