

# Characteristics of road accidents with youngsters in Europe

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## Introduction

- 'Youngsters' are defined as people between 15 and 17 years old.
- This age corresponds to the learning of autonomy and more particularly of access to different means of transport, while they are also beginning to gain access to driving motorized vehicles.
- In 2014, 631 persons aged 15-17 years old died in road accidents in the EU countries.

## Objective

The objective of this research is the analysis of basic road safety parameters related to young people aged 15-17 years old in the EU countries, using the EU CARE database with disaggregate data on road accidents and the EU Injury Database (EU IDB).

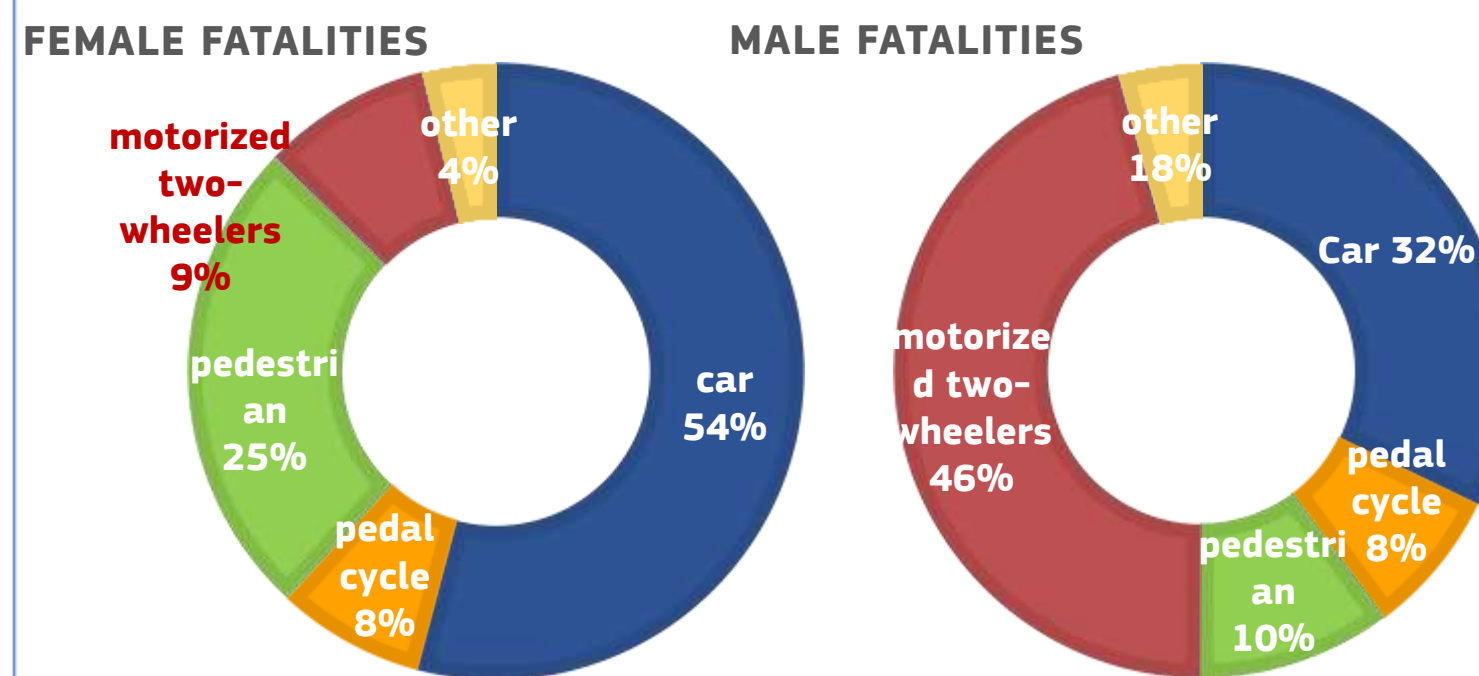
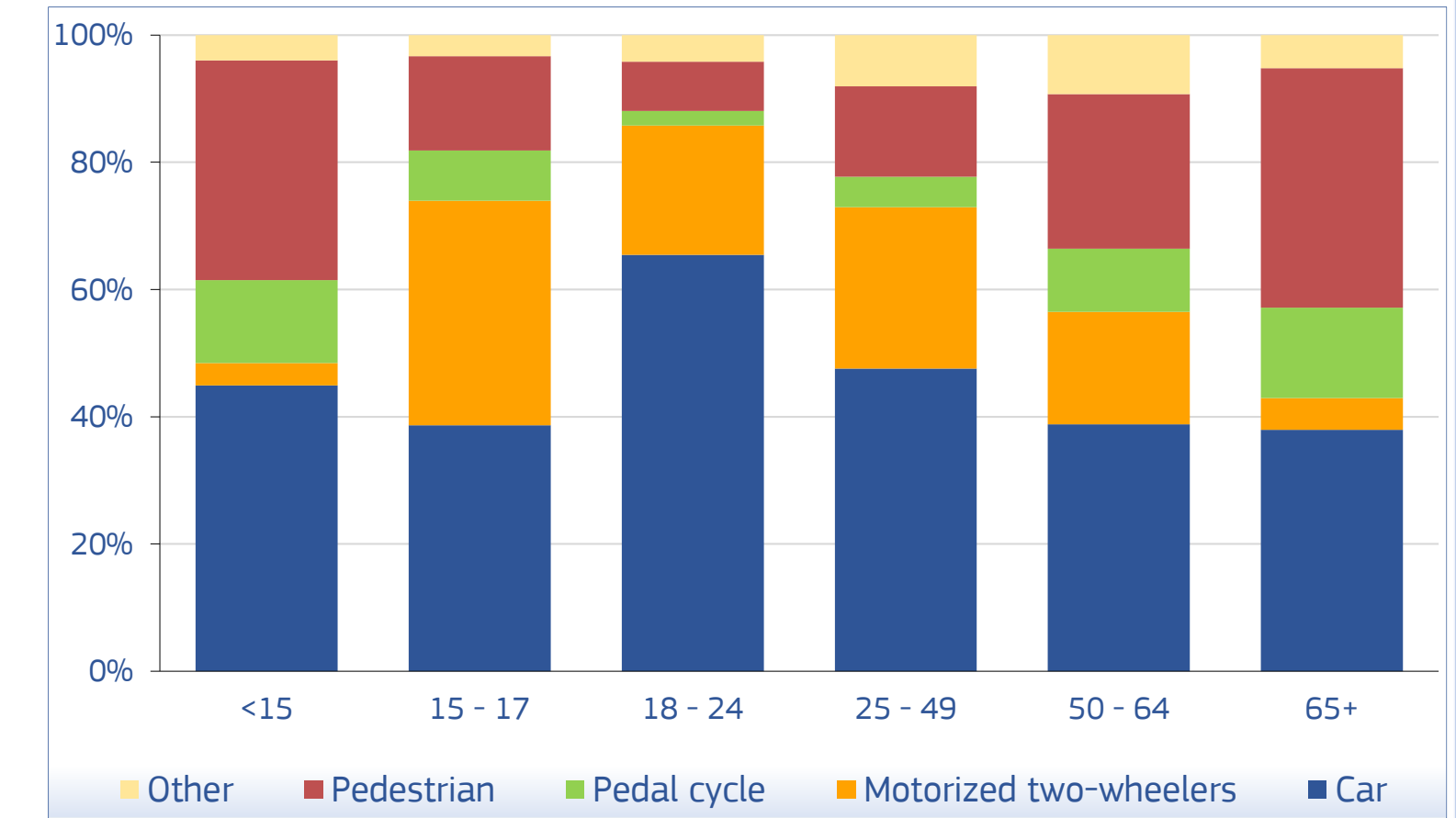
## Methodology

- Macroscopic road accident data from the EU CARE database and injury data from the EU Injury Database (EU IDB).
- Macroscopic time series data from 28 EU countries for the period 2005-2014.
- Injury data from hospitals in 9 EU countries for the period 2005-2008 using a common methodology.
- Road accident data correlated with basic safety parameters:
  - casualty age and gender
  - road user type
  - mode of transport
  - type of road
  - time of the day and day of the week
  - seasonality
- Available risk exposure data from other international data files (Eurostat, etc.).



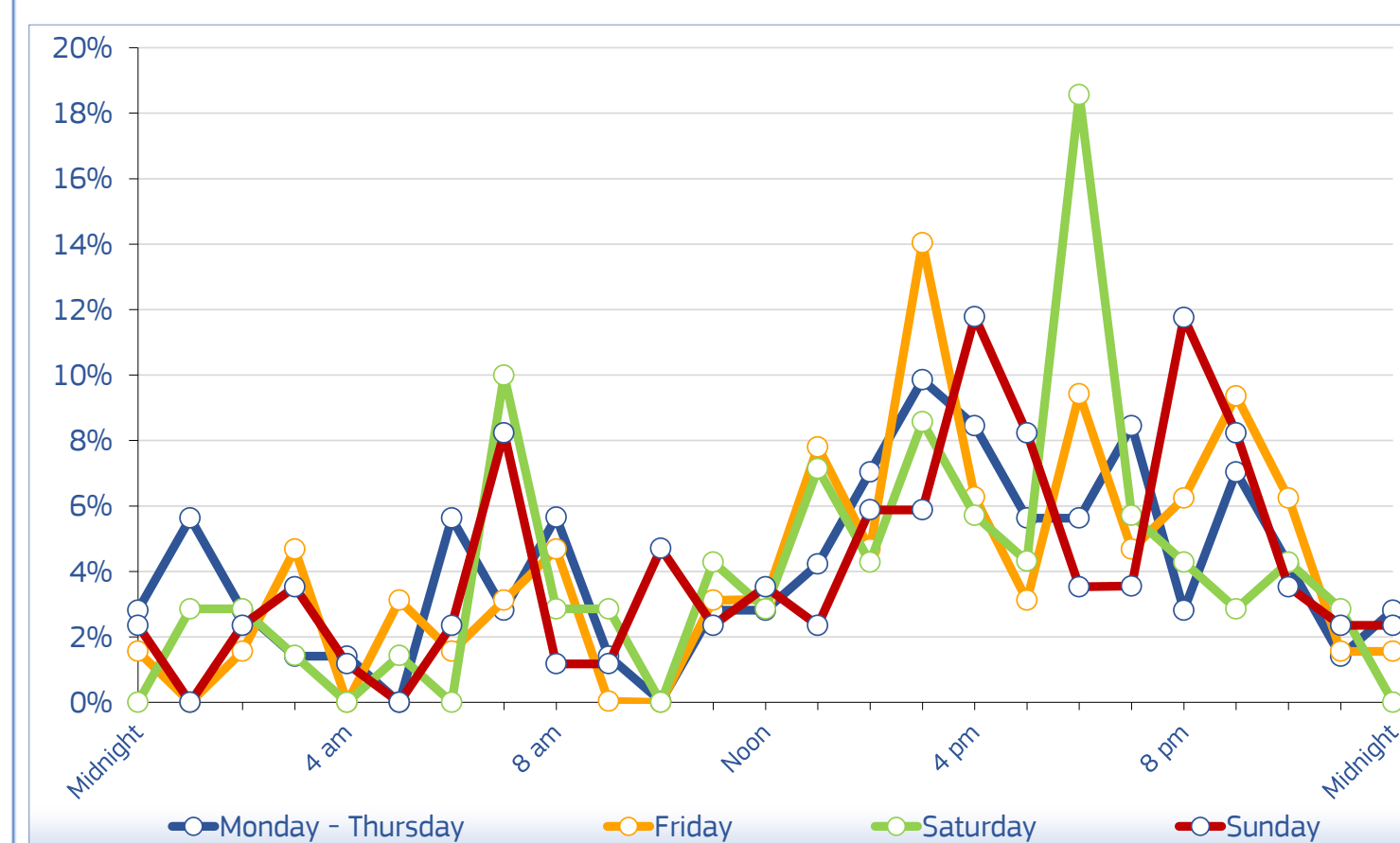
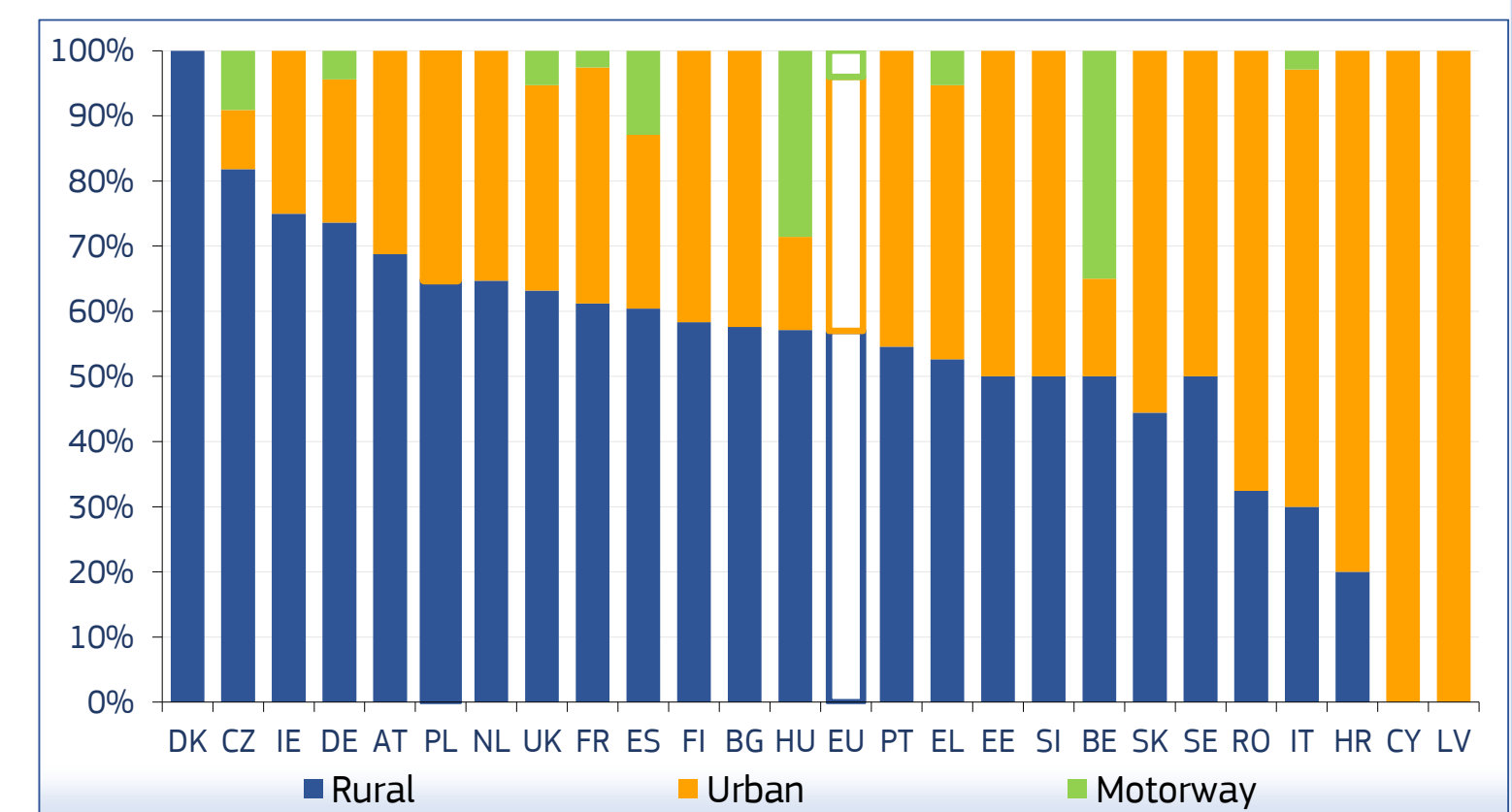
## Road Safety Parameters of Youngsters

- The motorized two-wheelers share is much higher for 15-17 year olds than for the other age groups.
- The share of car occupants among youngster fatalities is similar to the older age groups except 18-24 year olds.



- 46% of 15-17 year old males killed in road accidents were riding motorized two-wheelers.
- 54% of female fatalities occurred whilst travelling in a car.
- The percentages of killed as pedestrians differ significantly between the two genders.

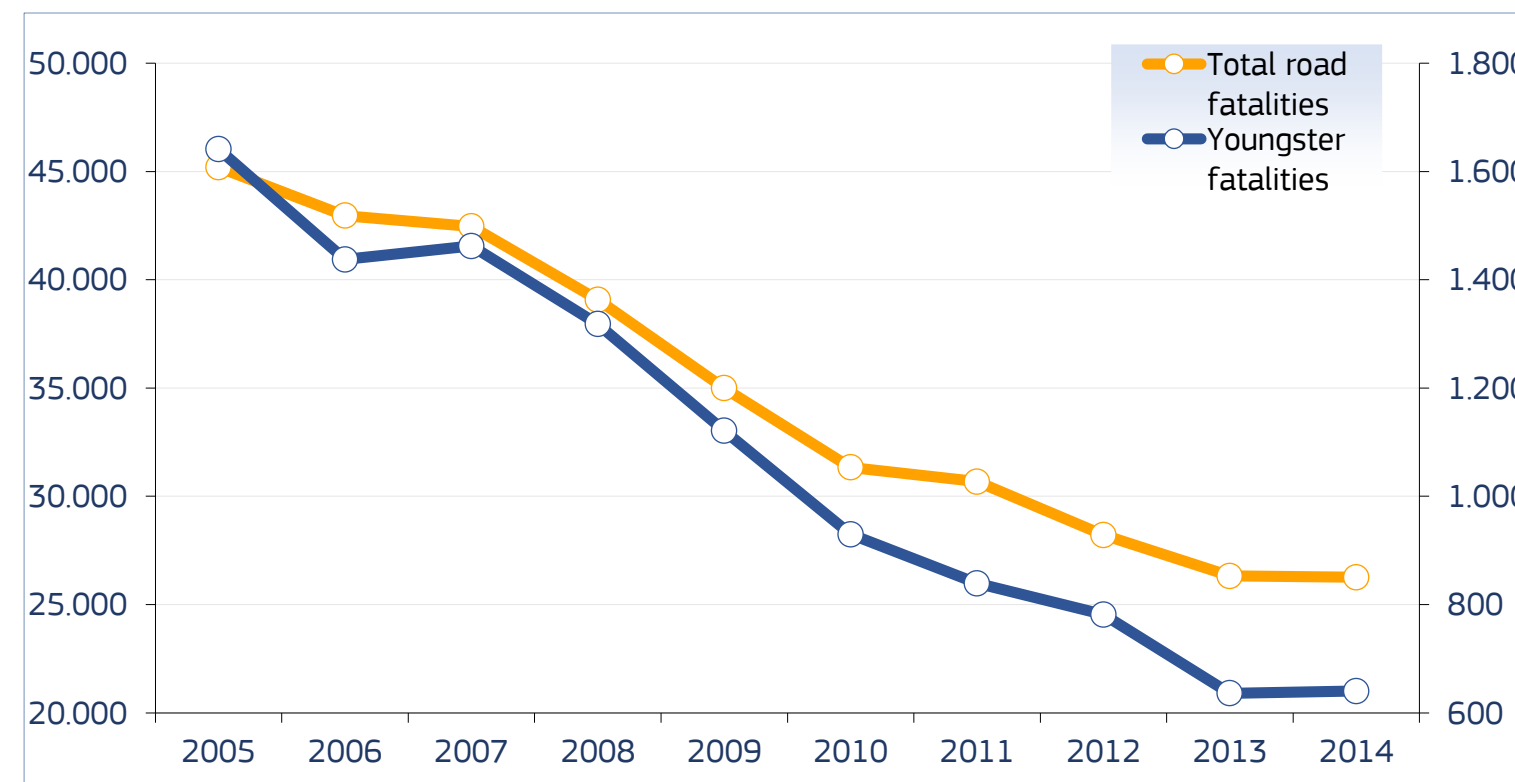
- Most of the fatal road accidents took place on rural roads (56%).
- Only 4% of fatalities occurred on motorways.
- The highest share of youngster fatalities in urban areas was recorded in Romania and Italy (68% and 67% respectively).



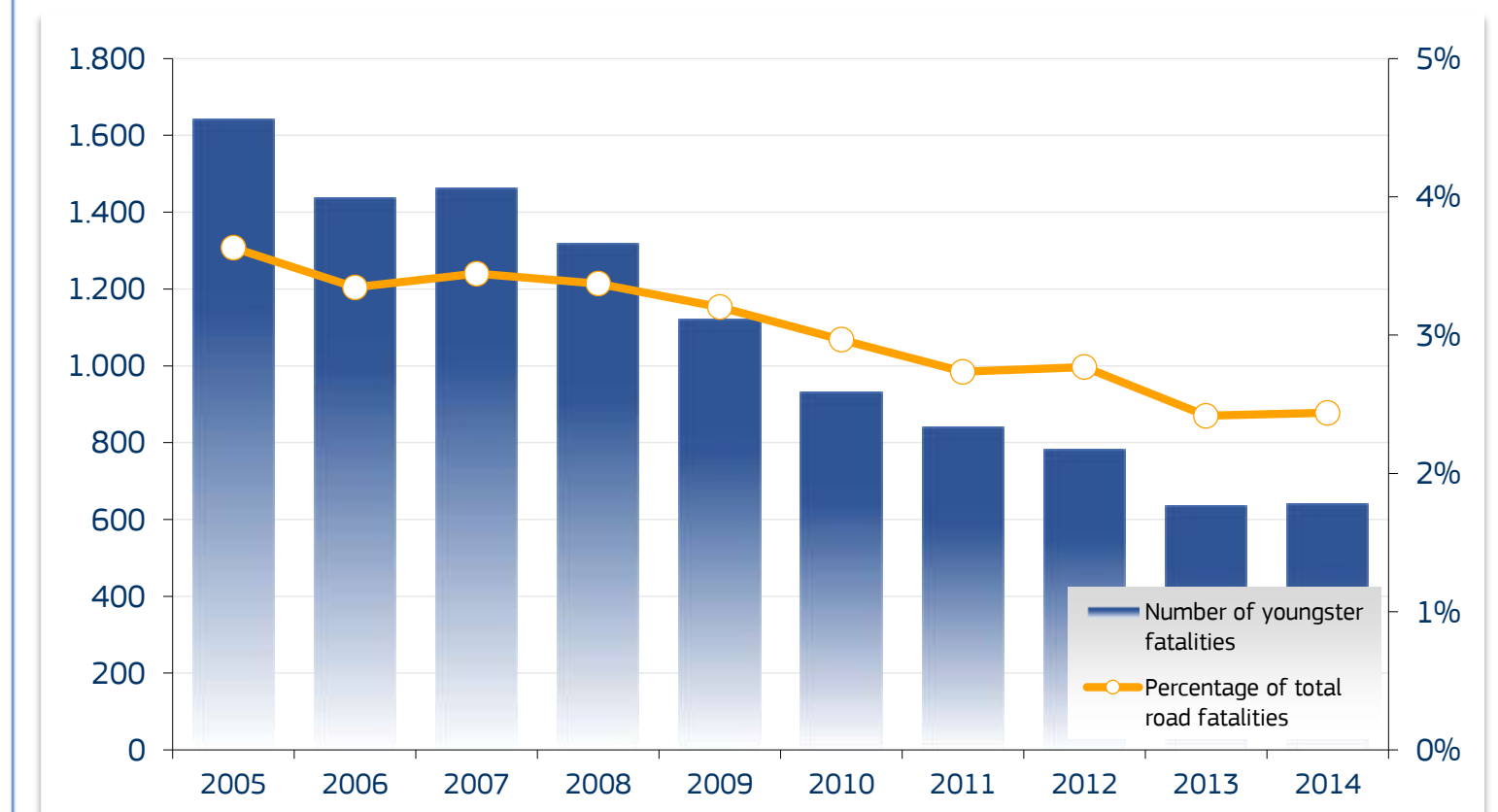
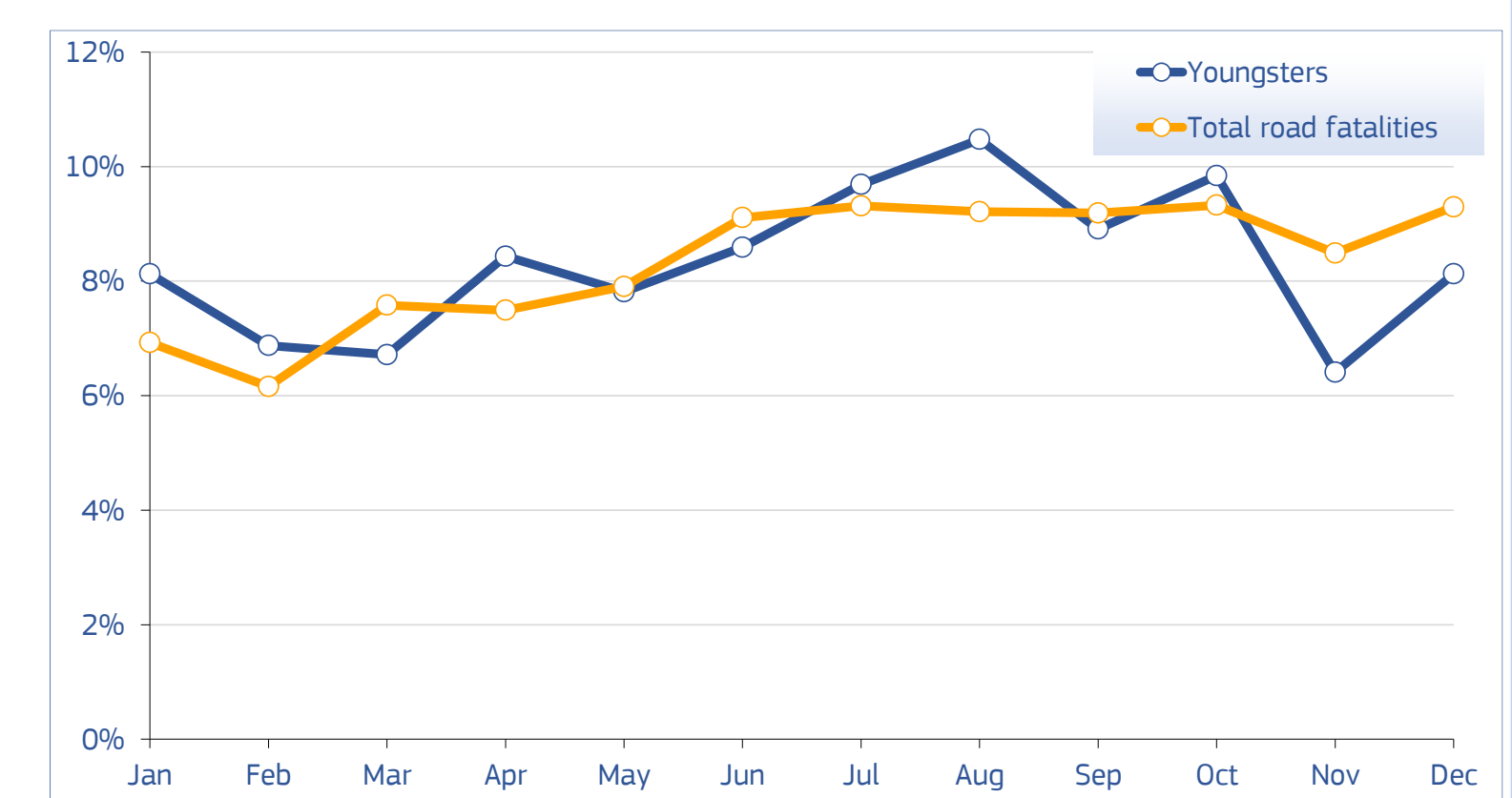
- Most youngster fatalities occurred during the weekends.
- A peak of youngster fatalities occurring at 6pm on Saturdays is prominent.

## Overall Road Safety Trends

- Youngster fatalities decreased by 62% between 2005 and 2014, while total road fatalities fell by 42%.



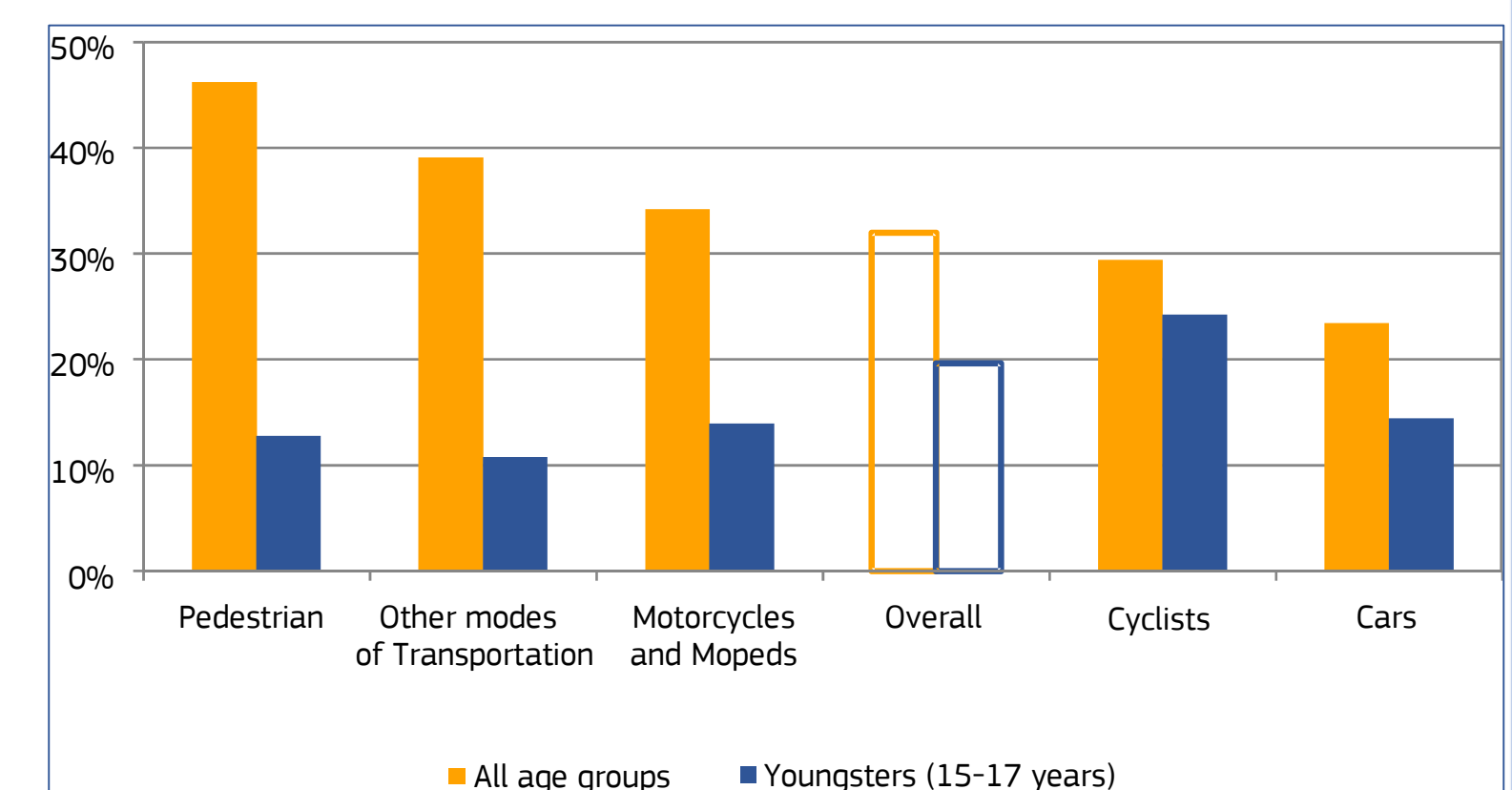
- The number of fatalities amongst youngsters peaks in August.
- The difference between youngsters' road fatalities and total fatalities per month is highest in November.



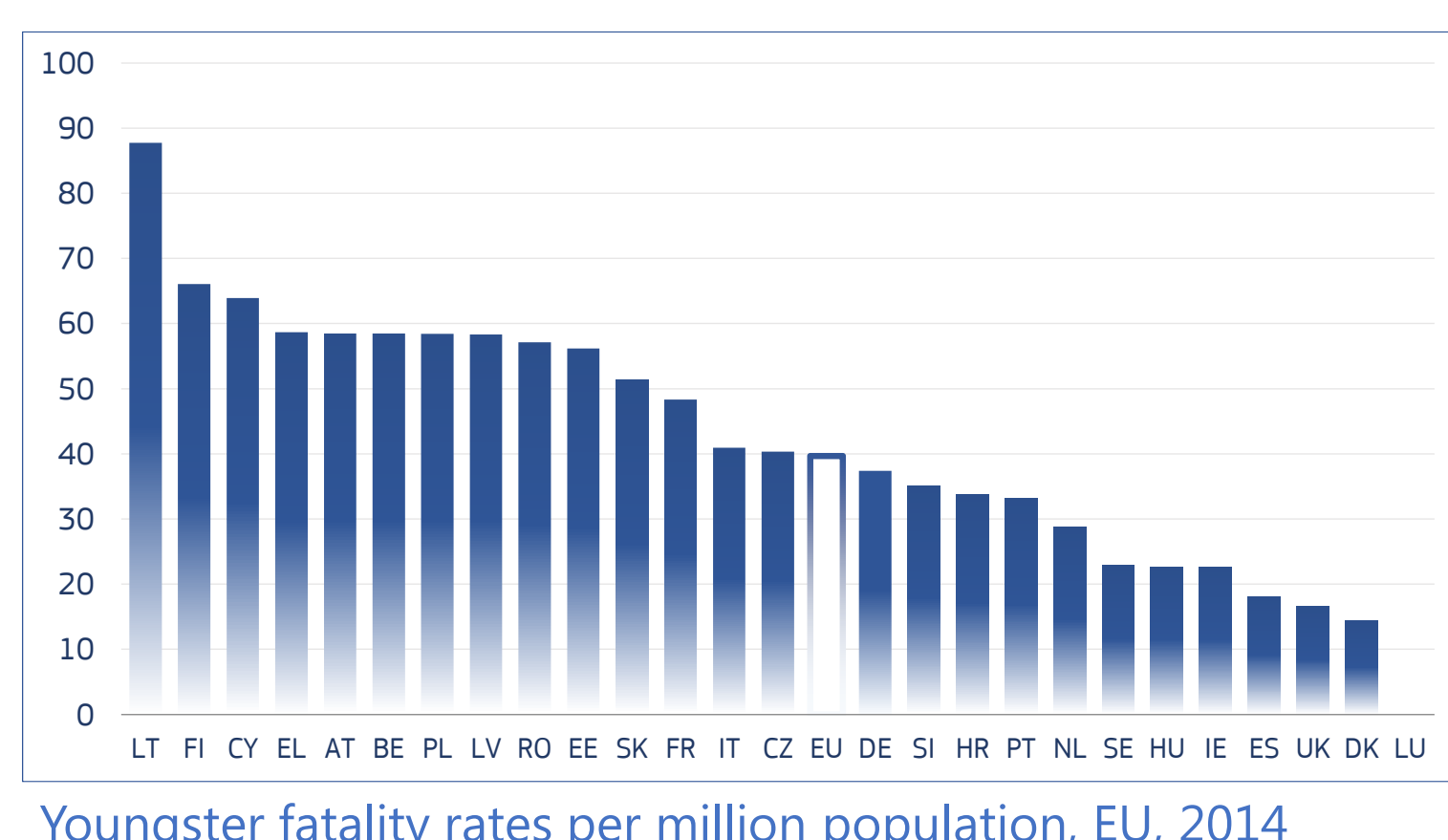
- In 2014, youngsters represented almost 2,4% of deaths in road accidents in the EU.
- The highest percentage of youngster fatalities was recorded in Finland (5%).

## Health Indicators

- 32% of road accident casualties recorded in the IDB were admitted to the hospital overall, compared with 20% for youngsters.
- Youngsters' average stay in hospital was about six days.



- In 2014, the fatality rate was 40 people per million population for the youngsters in the EU.
- The fatality rate was about five times higher in Finland than in Denmark.



## Discussion

- Youngsters are a special age group of road users, with different needs and characteristics than other road users.
- A significant reduction by 62% in youngster fatalities occurred between 2005 and 2014 in the EU.
- Motorized two-wheelers' fatality share is higher at this age group.
- The results of the analysis allow for an overall assessment of the youngsters safety level in the European road network.

## Acknowledgements

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