

# Characteristics of Road Accidents with Young People in Europe

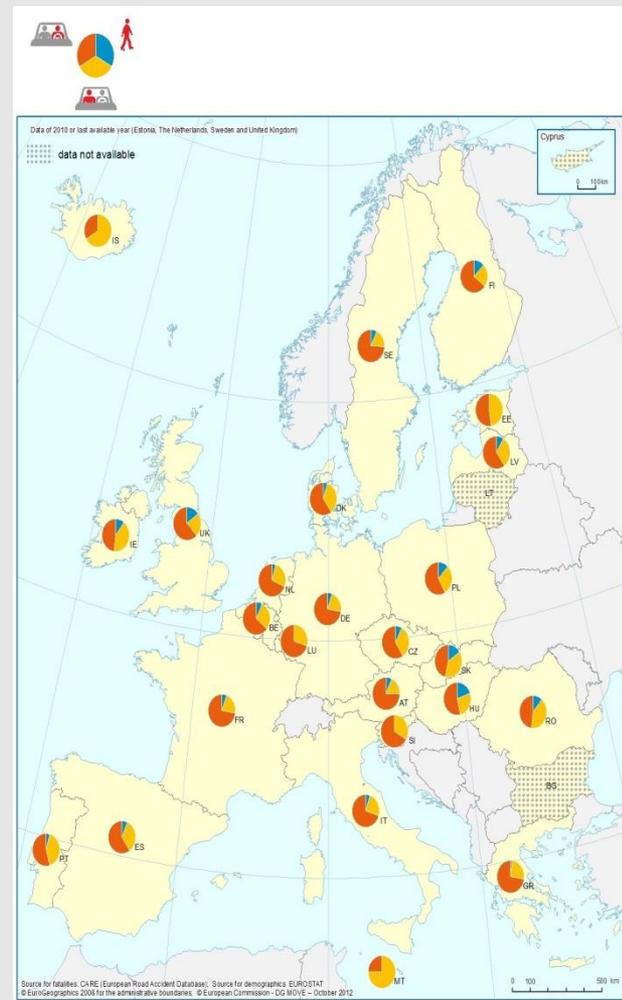


The 13th World Conference  
on Transport Research  
Julho 15- 18, 2013  
Rio de Janeiro, Brasil

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# Introduction

- Young people (defined as those between 18 and 24 years old) are vulnerable road users.
- More than 73.000 people aged 18-24 years old were killed in road accidents in the EU-20 between 2001 and 2010.
- The number of young people killed in road accidents almost halved between 2001 and 2010.
- Road accidents involving a young driver account for 18% of total road accident fatalities
- Young drivers play an important role in the overall public health problem of road traffic safety risk



# Objectives

- Macroscopic analysis of basic road safety parameters related to young people, using data from the EU CARE database with disaggregate data on road accidents, together with data from other international data files.
- Comparative analysis among countries will allow for drawing an overall picture of the safety level of young people in Europe.
- Provide useful support to all decision makers working for the improvement of safety in the European road network.

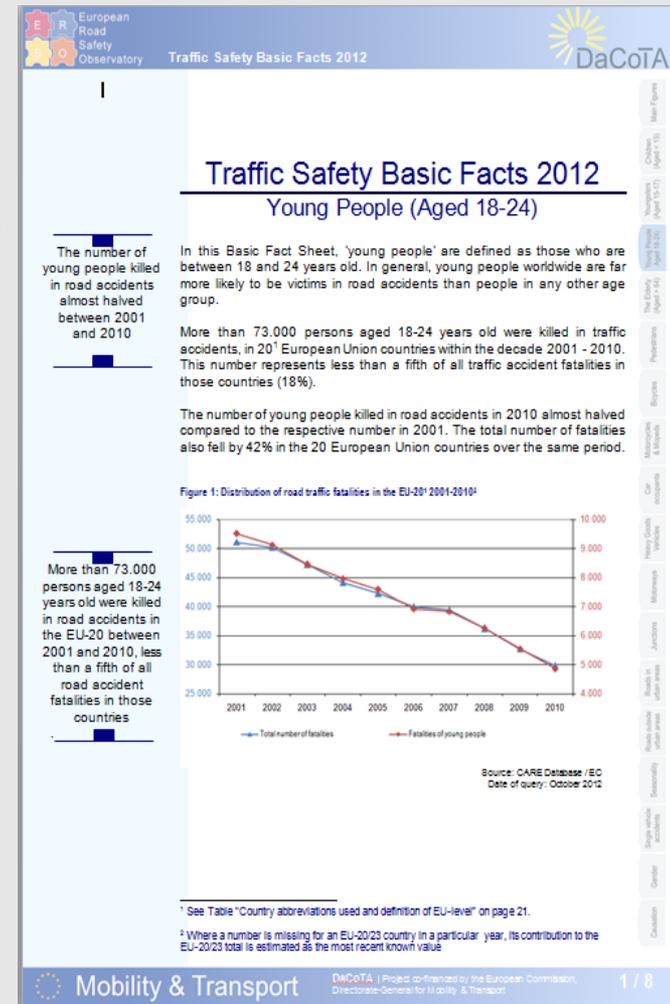


*This work was carried out within DaCoTA project of the 7<sup>th</sup> framework programme on transport research of the European Commission.*

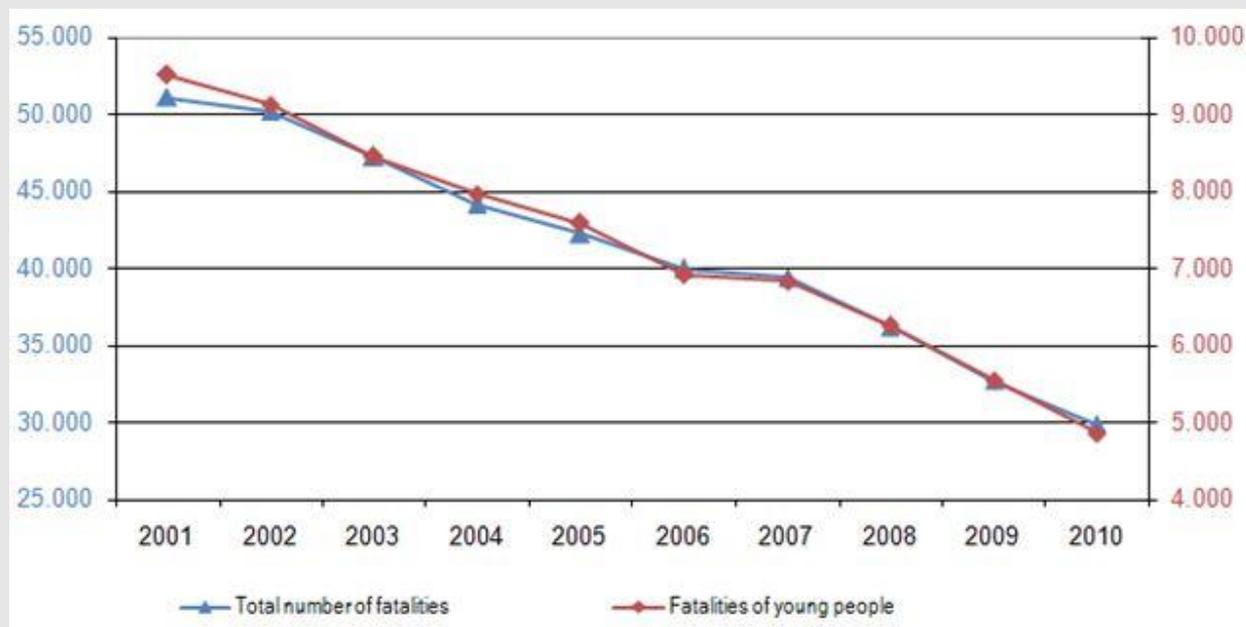


# Methodology

- Road accident data from the EU-CARE database.
- 23 EU countries (BE, CZ, DK, DE, IE, EE, EL, ES, FR, IT, LV, LU, HU, NL, AT, PL, PT, RO, SI, SK, SE, FI, UK) provide data for young drivers.
- Data for the period 2001- 2010.
- Road accident data on young people correlated with basic safety parameters:
  - mode of transport
  - gender, casualty age & road user type
  - area and road network type
  - day of week and time of day
  - seasonality
- Available risk exposure data from other international data files (Eurostat, etc.).

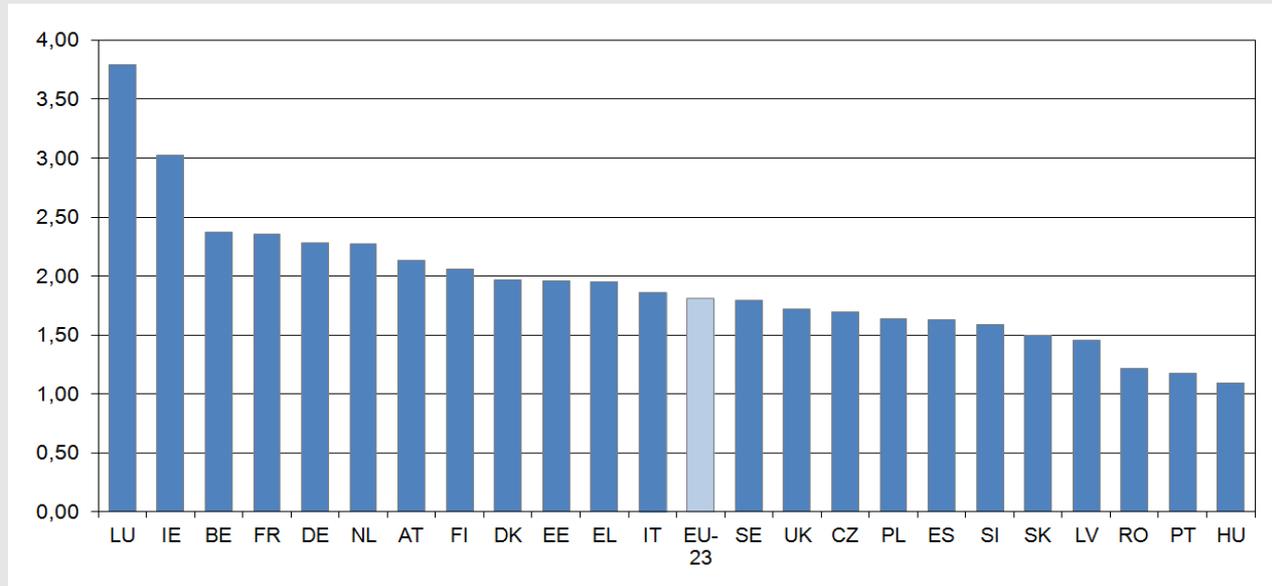


# Overall Trends



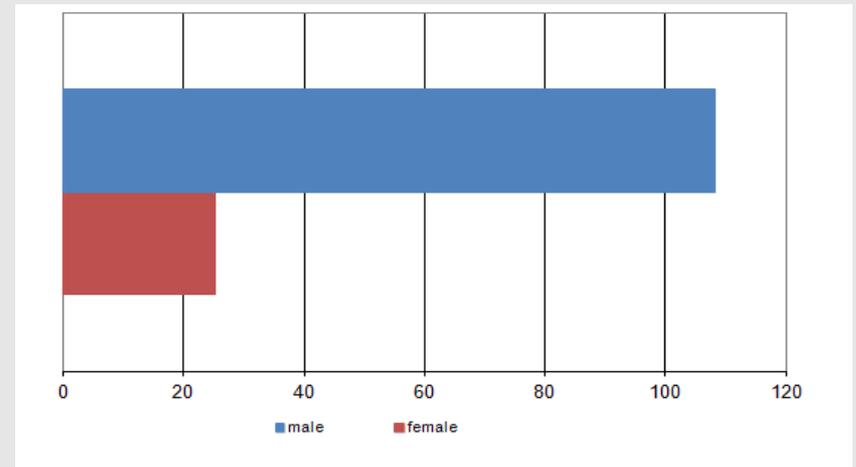
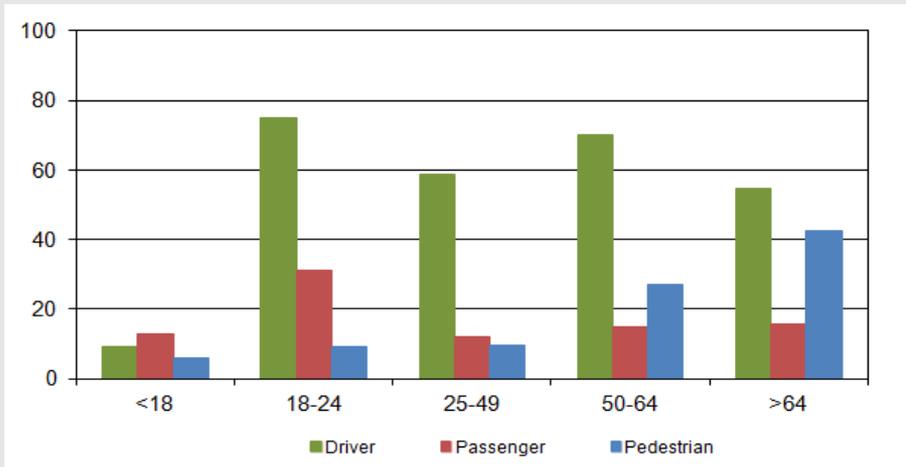
- The number of young people killed in road accidents in 2010, was 48% less than the respective number in 2001.
- The total number of fatalities also fell by 42% in the 19 European Union countries over the same period.

# Relative fatality rate for young people



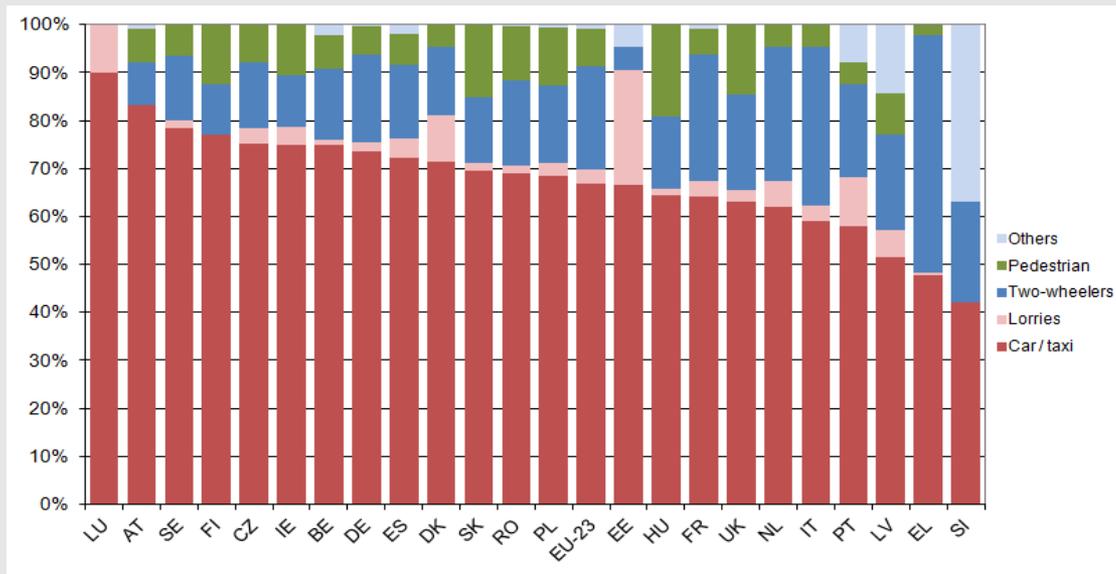
- On average, young people are at almost twice the risk of being killed in a road accident across the EU-23 countries.
- Ireland has the highest relative fatality rate (3,0) whereas Hungary and Portugal have the lowest relative rate (1,1) among the 23 countries in 2010.

# Fatalitiy rates per million population by age, road user type and gender



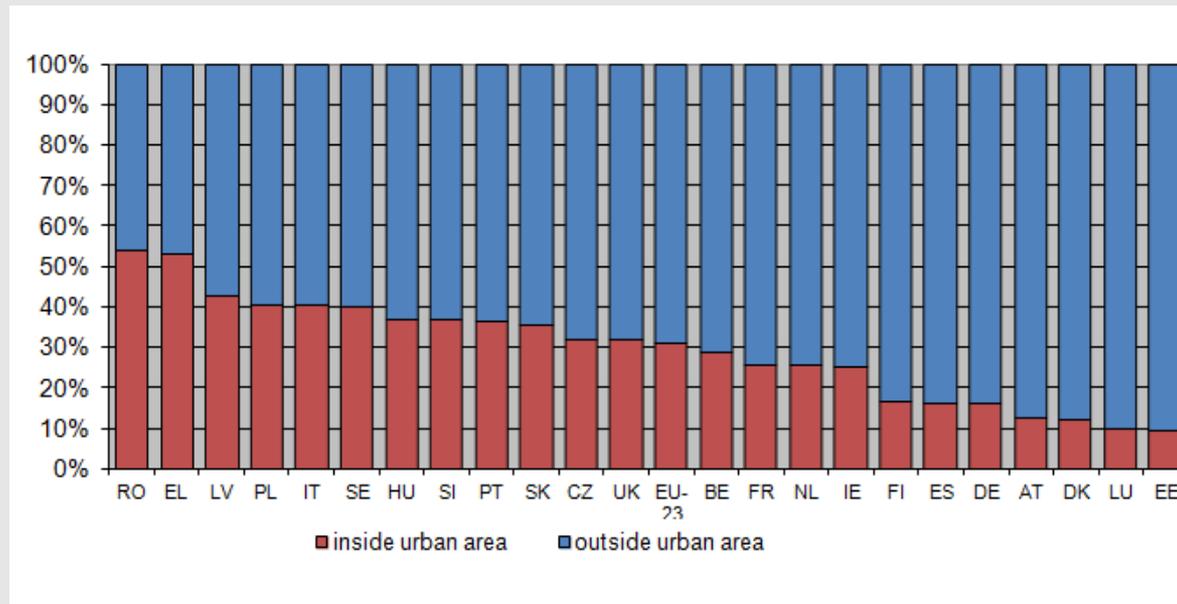
- Driver and passenger fatality rates for 18-24 years old people are higher than those of other age groups.
- 81% of fatalities among young people were men.

# Proportion of young fatalities by mode of transport



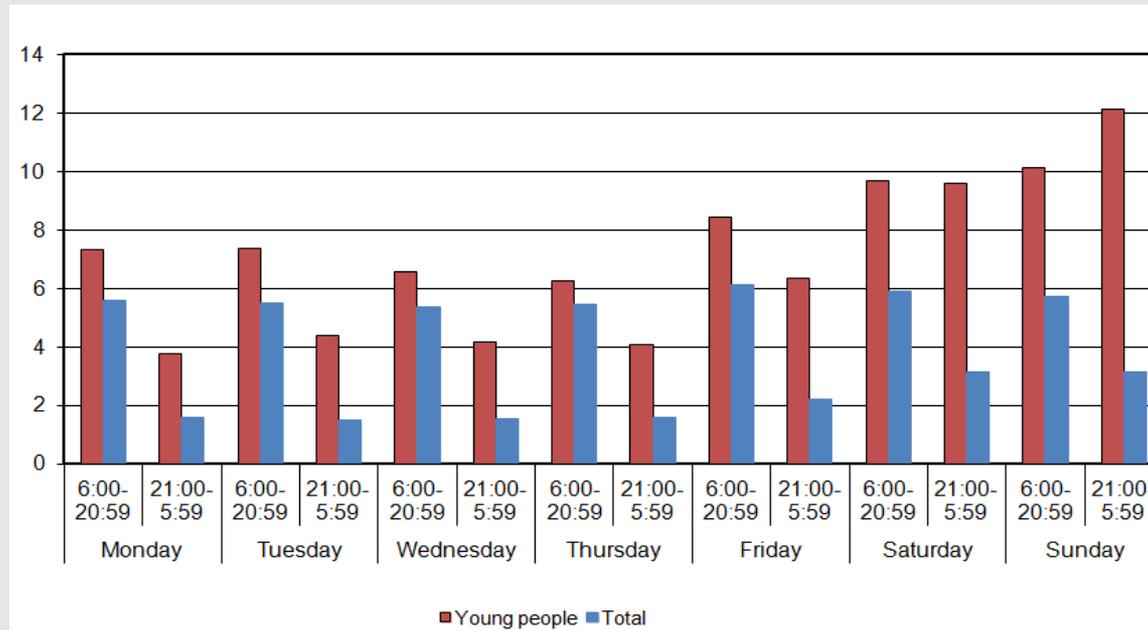
- More than two-thirds of fatalities of young people across the European countries are in cars or taxis, with mopeds and motorcycles accounting for 21%.
- The highest proportion among the 23 European countries of young people fatalities by mode of transport in 2010 was in Austria (84% by car/taxi).

# Distribution of fatalities amongst young people by area type



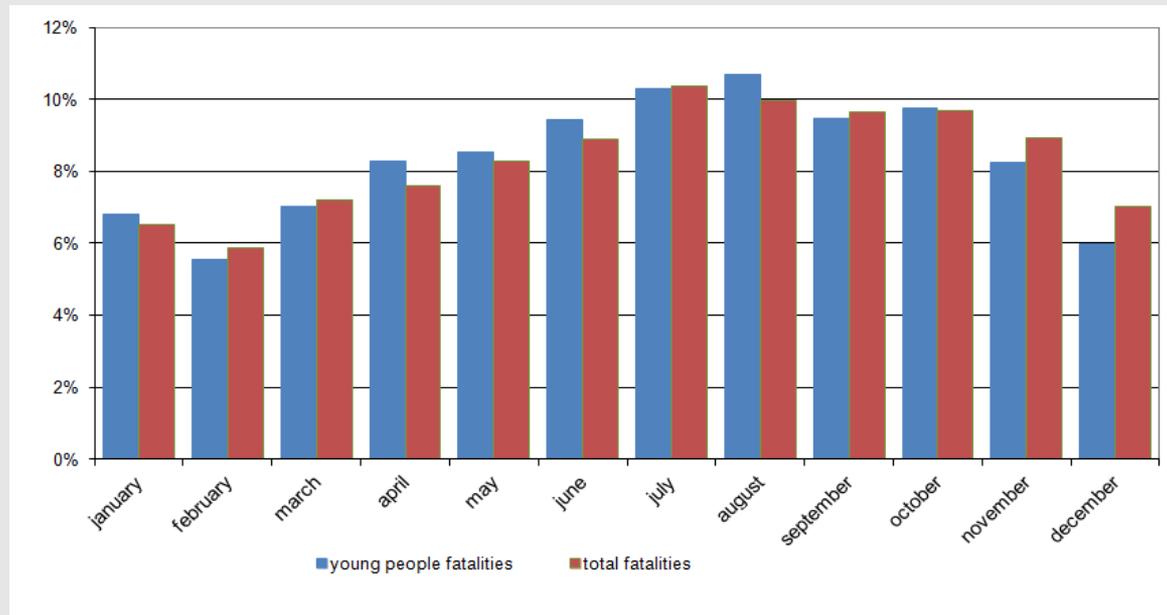
- 69% of fatalities of young people in road accidents occurred in rural areas in 2010.
- Estonia had the lowest percentage of young people fatalities inside urban areas (10%) whereas Romania had the highest amongst the EU-23 countries in 2010.

# Fatality rates by day of week and time of day



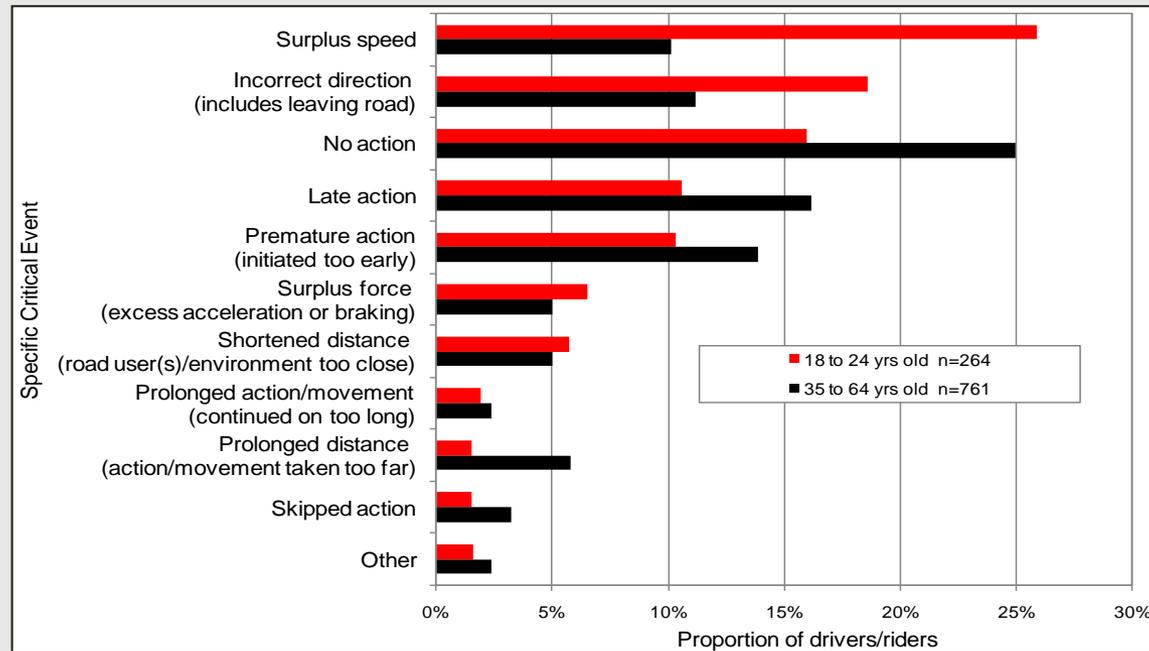
- In 2010 more people aged 18-24 were killed between 06:00 and 20:59 on week-days than between 21:00 and 5:59 (the night-time and early morning).
- On Saturdays and Sundays fatality rates for young people are much higher than the respective weekday ones.

# Distribution of total and young people fatalities by month



- Fatalities amongst young people vary seasonally, with higher percentages in summer and lower percentages in winter.
- The highest proportion of young people fatalities in 2010 occurred in August (11%) whereas the lowest proportion occurred in February (6%).
- As far as total fatalities are concerned, the highest proportion of total fatalities occurred in July (10%) and in August (10%) whereas the lowest proportion occurred in February (6%).

# Distribution of specific critical events – young vs middle aged drivers/riders

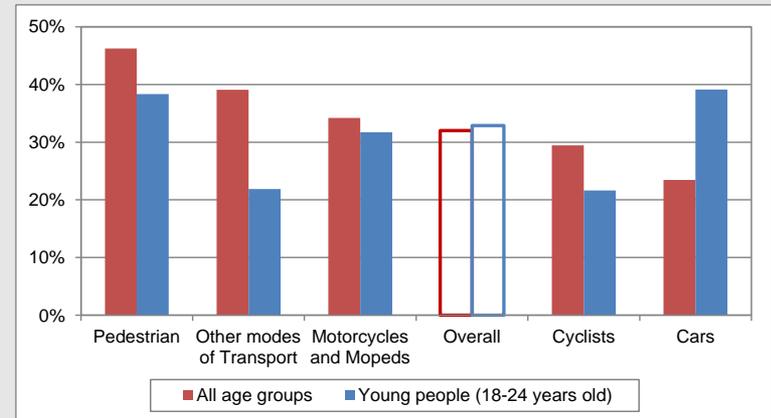


- The clearest difference between the two age groups relates to the specific critical event of surplus speed, attributed to just over one quarter of the young age group but only 10% of the older group.
- Incorrect direction is also recorded more frequently for the younger age group than the older group.

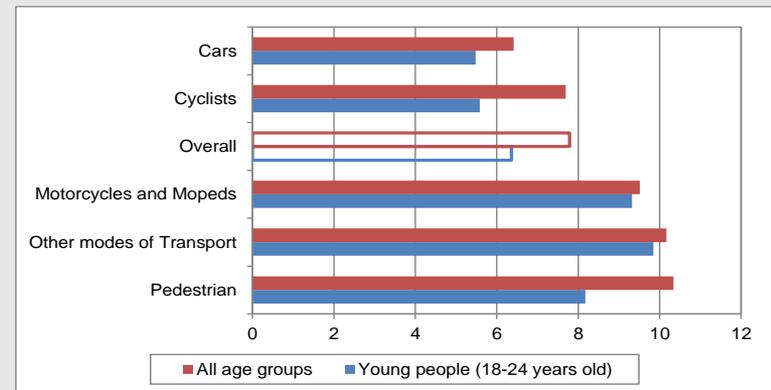
# Road Accident Health Indicators

- By 2012, thirteen member states routinely collected data in a sample of hospitals and contributed them to the EU injury Database.
- According to estimates based on the EU IDB more than four million people are injured annually in road traffic accidents, one million of whom have to be admitted to hospital.
- Overall, 32% of road accident casualties recorded in the IDB were admitted to the hospital
- About 30% of injured young people who attended a hospital were admitted to the hospital; their average stay in hospital was six days.

Proportion of casualties who were admitted to hospital, by age group and mode of transport



Average length of stay (hospital bed days), by age group and mode of transport



# Conclusions & Recommendations

- The results of the analysis allow for an overall picture of the safety level of young people in Europe, providing thus useful support to all decision makers working for the improvement of safety in the European road network.
- The young road fatalities patterns reflect also their exposure patterns. Exposure data are needed for a more complete picture.
- The number of fatalities amongst young people has been gradually reducing over the last ten years.
- Young people were at almost twice the average risk of being killed in a road accident across the EU-23 countries, which underlines the urgency of taking immediate appropriate counter measures.

# Characteristics of Road Accidents with Young People in Europe

## Apoio



## Patrocinadores

