



European  
Commission



# ROAD SAFETY IN THE EUROPEAN UNION

Trends, statistics  
and main challenges

November 2016

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This report is an internal working document summarising EU road safety statistics reported by the EU Member States for 2015 (2014 when data from 2015 are not available).

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## COUNTRY ABBREVIATIONS:

|    |                |
|----|----------------|
| AT | Austria        |
| BE | Belgium        |
| BG | Bulgaria       |
| CY | Cyprus         |
| CZ | Czech Republic |
| DE | Germany        |
| DK | Denmark        |
| EE | Estonia        |
| EL | Greece         |
| ES | Spain          |
| FI | Finland        |
| FR | France         |
| HR | Croatia        |
| HU | Hungary        |
| IE | Ireland        |
| IT | Italy          |
| LT | Lithuania      |
| LU | Luxemburg      |
| LV | Latvia         |
| MT | Malta          |
| NL | Netherlands    |
| PL | Poland         |
| PT | Portugal       |
| RO | Romania        |
| SI | Slovenia       |
| SK | Slovakia       |
| SE | Sweden         |
| UK | United Kingdom |



Every day, 70 people die on European roads and 370 suffer serious road traffic injuries. This is tragic and simply unacceptable.

The European Day Without a Road Death (EDWARD) on 21 September 2016 was a great opportunity to encourage all road users to reduce risks and improve safety while driving, riding, walking or cycling.

The results were excellent and encouraging. By increasing awareness for just one day, we had a 39% lower fatality rate than the year

before, and 27 lives were saved. 19 out of 31 participating countries succeeded in having no deaths, while 7 others recorded significantly reduced fatality numbers on that day. A fantastic achievement for EDWARD this year!

This clearly demonstrates that when all stakeholders come together we really can make an impact and save lives. Together with law enforcement authorities, we will continue to use events like this to make sure that more attention is paid to the problem of road fatalities and serious injuries.

Road safety is one of my top priorities as EU Commissioner for Transport. Our main objective is to save lives and protect people's health all over Europe.

Road safety in the European Union has improved a lot in recent years: between 2001 and 2015, the number of road deaths decreased by 52%. The EU has the lowest fatality rate of any region in the world: in 2015, the EU reported an average of 51.5 deaths per million inhabitants, against 109 deaths per million in the USA and 174 deaths per million globally.

However, since 2013 progress in the EU has slowed down in this area. The latest road safety statistics for 2015 show that the number of fatalities on our roads has not decreased over the past two years. This trend needs to be taken seriously.

We need fresh ideas, projects and action to successfully move towards our 2020 road safety goals. We should never forget that every death on our roads is simply one too many. Road safety concerns all of us. Project EDWARD has shown that we can deliver incredible results when joining forces. We are on the right track to making the aspirational goal of zero fatalities a reality.

A handwritten signature in black ink, which appears to read 'Violeta Bulc'. The signature is fluid and cursive.

**Violeta Bulc**  
*EU Commissioner for Transport*

# 1. The EU's road safety situation in 2015

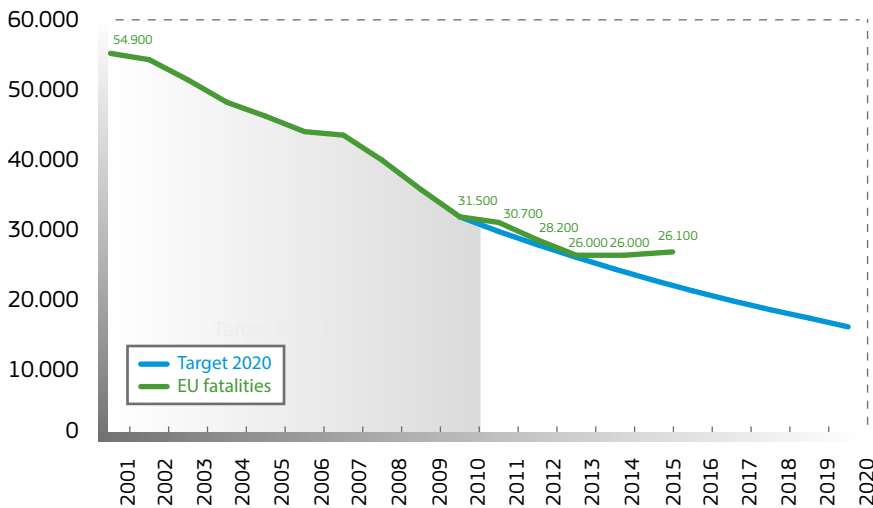
- In 2015, 26 112 people died on EU roads.
- There is no improvement compared to 2014 and 2013.
- Between 2010 and 2015, the number of road deaths decreased by 17%. This means 5 400 fewer deaths in 2015 than in 2010.
- The EU's 2015 road fatality rate was 51.5 deaths per million inhabitants.
- In 2015, the countries with the lowest fatality rate per million inhabitants were Sweden (27), the UK (28), Denmark (31), the Netherlands (31) and Malta (26).
- Countries with the weakest road safety records were Bulgaria (98), Romania (95), Latvia (95), Lithuania (83), and Croatia (82).
- In 2015, seven EU countries recorded a fatality rate below 40 deaths per million inhabitants and none of the Member States had a fatality rate above 100 deaths per million inhabitants.



European roads remain the safest: with 51.5 road fatalities per one million inhabitants, the EU has the lowest fatality rate out of all regions in the world. Between 2001 and 2010, the EU cut the number of road deaths by 43%, and between 2010 and 2015 by another 17%. 26 112 people lost their lives in the EU last year. This is 5 400 fewer than in 2010.

However, progress has clearly slowed down lately: the change in fatality figures was close to zero from 2013 to 2014, and in 2015 there was even a slight increase. This means that efforts must be stepped up, especially at national level, to reach the strategic target of halving the number of road deaths by 2020.

### EU FATALITIES AND TARGETS 2001-2020

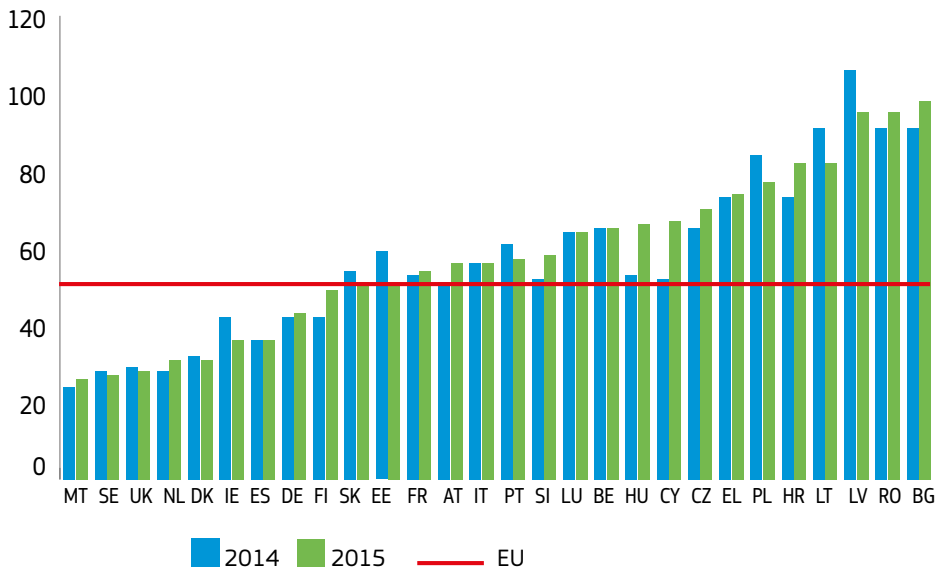


Source – CARE (EU road accidents database)

While most Member States have improved their road safety records since 2010, there is still a significant gap in performance across the EU. In 2015, countries with the lowest fatality rate per million inhabitants were Sweden (27), the UK (28), Denmark (31), the Netherlands (31) and Malta (26). On the other hand, those with the weakest road safety records were Bulgaria (98), Romania (95), Latvia (95), Lithuania (83), and Croatia (82), even if two of them reported a significant decrease from 2014 to 2015: Latvia (-11%) and Lithuania (-9%).

In 2015, most EU countries recorded a fatality rate below 80 deaths per million inhabitants and, for the first time ever, seven EU countries recorded a fatality rate below 40 (the EU average was 51.5). In addition, and for the very first time, none of the Member States had a fatality rate above 100 deaths per million inhabitants.

## FATALITIES PER MILLION INHABITANTS BY COUNTRY IN 2014 AND 2015



In 2015, on average only about 8% of road fatalities occurred on motorways; 37% happened in urban areas; most (55%) occurred on rural roads.

## ROAD FATALITIES IN THE EU BY TYPE OF ROADS (2015)

8%



Motorway

37%



Urban areas

55%



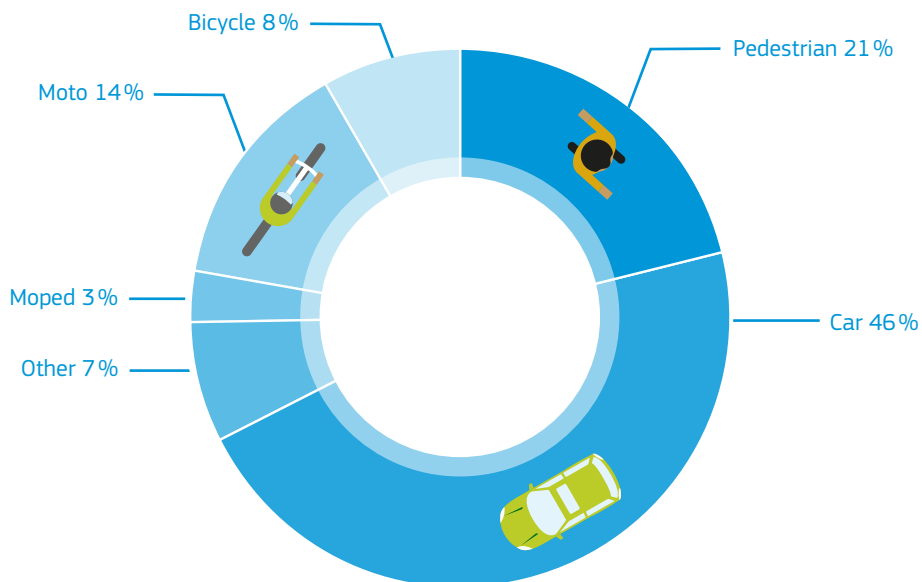
Rural roads



Vulnerable road users, including pedestrians, cyclists and motorcyclists, accounted for almost half of the road victims, and their proportion was even higher in urban areas. 21% of all people killed on roads in 2015 were pedestrians, and pedestrian fatalities decreased at a lower rate than other fatalities (by 11% from 2010 to 2015, compared to the total fatality decrease

of 17%). Cyclists accounted for 8% of all road deaths in the EU. The number of cyclist fatalities decreased by only 4% between 2010 and 2015, which is much lower than the total fatality decrease (17%). Motorcyclists, who are less protected during a crash, accounted for 14% of road fatalities.

## ROAD FATALITIES IN THE EU BY TRANSPORT MODE IN 2015



## SERIOUS ROAD TRAFFIC INJURIES



For every person killed in traffic crashes, many more suffer serious injuries with life-changing consequences. Serious injuries are not only more common but are also often more costly to society because of the long-term rehabilitation and healthcare needed. Vulnerable road users, such as pedestrians, cyclists, motorcyclists or elderly road users, are especially affected.

As of 2015, Member States started to report data on serious injuries based on a new, commonly agreed definition following medical standards. The international MAIS trauma scale (maximum abbreviated injury score) has been used as the EU definition of serious road traffic injuries since 2014. The 'scale 3 and more' (MAIS3+) is the one that applies to serious injuries.

Until now, the Commission has received preliminary data from sixteen Member States (Belgium, the Czech Republic, Germany, Spain, Ireland,

France, Italy, Cyprus, the Netherlands, Austria, Poland, Portugal, Slovenia, Finland, Sweden and the United Kingdom). The quality of these data is currently being checked. Further data are expected from at least Romania and Estonia. The countries for which data is available represent about 80% of the EU's population and account for 80% of all fatalities.

Based on the data provided, it is estimated that 135 000 people are seriously injured on EU roads. Therefore, on average there are 5 serious injuries for each road fatality in the EU. Most of those seriously injured are vulnerable road users, such as pedestrians, cyclists and motorcyclists, and most are elderly, an age group that is growing in number. Their proportion is even higher in towns and cities.

## NUMBER OF SERIOUSLY INJURED IN EU MEMBER STATES

| MEMBER STATE   | FATALITIES BY POPULATION | HOSPITALISED | SERIOUSLY INJURED MAIS3+ |
|----------------|--------------------------|--------------|--------------------------|
| Belgium        | 65                       | 373          | 265                      |
| Bulgaria       | 98                       | 320          | n.a                      |
| Czech Republic | 70                       | 236          | 271                      |
| Denmark        | 31                       | 315          | n.a                      |
| Germany        | 43                       | 834          | 190                      |
| Estonia        | 51                       | 352          | n.a                      |
| Ireland        | 36                       | 98           | 74                       |
| Greece         | 74                       | 99           | n.a                      |
| Spain          | 36                       | 204          | 137                      |
| France         | 54                       | 412          | 388                      |
| Croatia        | 82                       | 668          | n.a                      |
| Italy          | 56                       | 790          | 246                      |
| Cyprus         | 67                       | 445          | 98                       |
| Latvia         | 95                       | 241          | n.a                      |
| Lithuania      | 83                       | 146          | n.a                      |
| Luxembourg     | 64                       | 561          | n.a                      |
| Hungary        | 65                       | 566          | n.a                      |
| Malta          | 26                       | 670          | n.a                      |
| Netherlands    | 31                       | 789          | 444                      |
| Austria        | 56                       | 873          | 164                      |
| Poland         | 77                       | 287          | 338                      |
| Portugal       | 57                       | 207          | 197                      |
| Romania        | 95                       | 456          | n.a                      |
| Slovenia       | 58                       | 452          | 103                      |
| Slovakia       | 51                       | 222          | n.a                      |
| Finland        | 49                       | 86           | 95                       |
| Sweden         | 27                       | 251          | 122                      |
| United Kingdom | 28                       | 352          | 78                       |
| EU             | 51,5                     | 485          | 257                      |

A recent study<sup>1</sup> carried out with the support of the European Commission analyses the most common characteristics of road traffic crashes that cause injuries of a MAIS3+ severity. The study provides an understanding of the most common factors contributing to serious road traffic injuries for pedestrians, bicyclists, motorcyclists and car occupants in the EU.



#### Common characteristics of crashes that severely injure pedestrians:

- Men and women are about equally represented.
- Elderly people and children are most at risk.
- Mainly cars and heavy vehicles are involved.
- Crashes occur mostly in urban areas on 50 km/h road sections.
- Main contributing factors are failure to look before crossing, poor judgment, speed and psychoactive substances.
- Head- and upper body injuries are most common when heavy vehicles and higher speed roads are involved. Legs are often injured in crashes involving cars on lower speed roads.



#### Common characteristics of crashes that severely injure cyclists:

- Men are overrepresented.
- Mostly the elderly, young people and children are at risk.
- Crashes involve cars or occur in single vehicle crashes.
- Crashes occur mainly in urban areas on 50 km/h road sections or intersections.
- Main contributing factors are failure to look, poor judgment, reckless driving and loss of control.
- Head injuries are frequent in all crash scenarios. Legs are mainly injured in single vehicle crashes involving elderly people on lower speed roads. Thorax injuries mainly happen in side-impact crashes in urban areas and at junctions.



<sup>1</sup>Study on Serious Road Traffic Injuries in the EU (SUSTAIN) [http://ec.europa.eu/transport/road\\_safety/topics/serious\\_injuries\\_en](http://ec.europa.eu/transport/road_safety/topics/serious_injuries_en)



#### Common characteristics of crashes that severely injure motorcyclists:

- More than 90% of victims are men.
- Young people and middle-aged are most at risk.
- Crashes mainly involve cars or fixed objects, or happen without an opponent.
- Most crashes happen in rural areas or on urban roads.
- Main contributing factors are failure to look, poor judgment, speeding and loss of control.
- Thorax injuries happen mostly in single vehicle crashes involving fixed objects on rural roads. Leg injuries occur mostly in crashes involving cars.



#### Common characteristics of crashes that severely injure car occupants:

- Two thirds of victims are men.
- Young people are most at risk.
- Most crashes involve cars or fixed objects, or occur without an opponent.
- Most injuries occur on rural roads, when driving at speeds of over 70 km/h.
- Main contributing factors are loss of control, speeding and the use of psychoactive substances.
- Thorax injuries are most common in crashes involving two cars, when car occupants wear seat belts but there is no airbag. Head injuries occur most frequently when a car crashes into a fixed object or heavy vehicle, when the driver is not wearing a seat belt and there is no airbag. Leg injuries occur most often in car-to-car crashes in lower speed zones.



## 2. Young people (18-24)

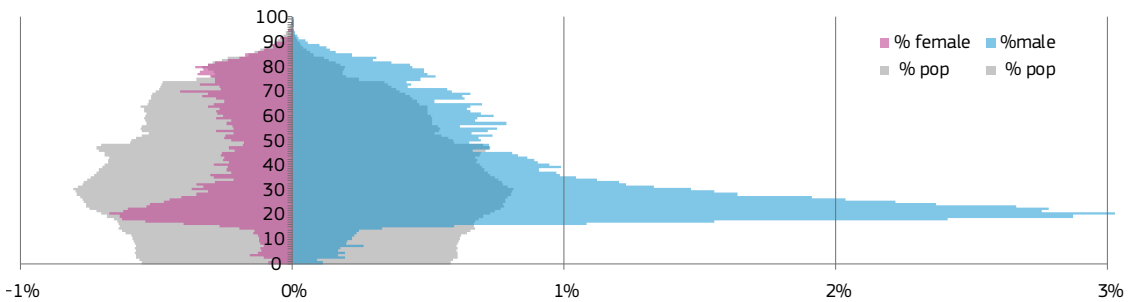
- Young people (between 18 and 24 year old) account for 14% of those killed on roads but represent only 8% of the population.
- Young people are almost twice as likely to be killed in a road crash than the average person.
- The number of young people died on the roads decreased by 65% between 2001 and 2015, more than for any other age group.
- In 2015, two thirds of young people killed in road crashes in the EU were drivers, whereas only 8% were pedestrians.



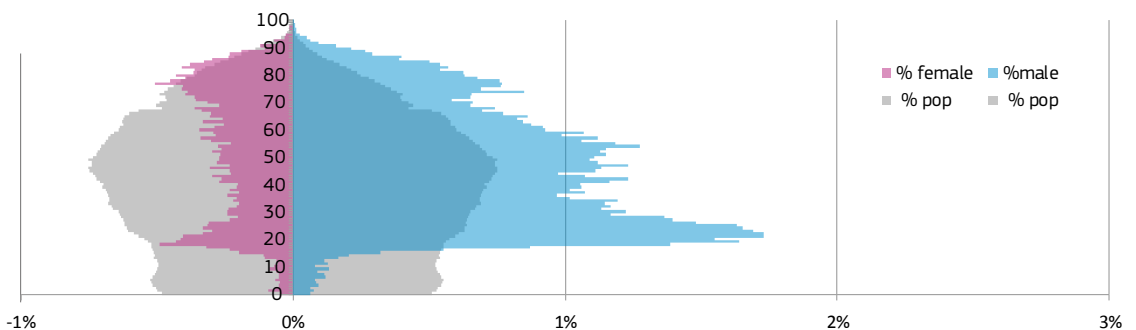
In 2015, more than 3 500 young people – those between 18 and 24 years – died in road crashes in the EU. Young people are far more likely to be victims of road crashes than any other age group. In 2015, almost 14% of people killed on EU roads were aged between 18 and 24. However, only 8% of the population falls within this age group.

The number of young people killed in road crashes more than halved between 2001 and 2015, while the total number of road deaths in the EU also fell by 52% over the same period.

### 1990: % OF FATALITIES AND POPULATION BY AGE AND GENDER



### 2015: % OF FATALITIES AND POPULATION BY AGE AND GENDER





The distribution of fatalities by age group has changed in recent years. On the one hand, the EU significantly reduced fatalities among young people over the last 25 years. On the other hand, the proportion of elderly people killed in road crashes has strongly increased. This trend goes hand-in-hand with how the population's age structure is changing: fewer younger and middle-aged people and more elderly people.

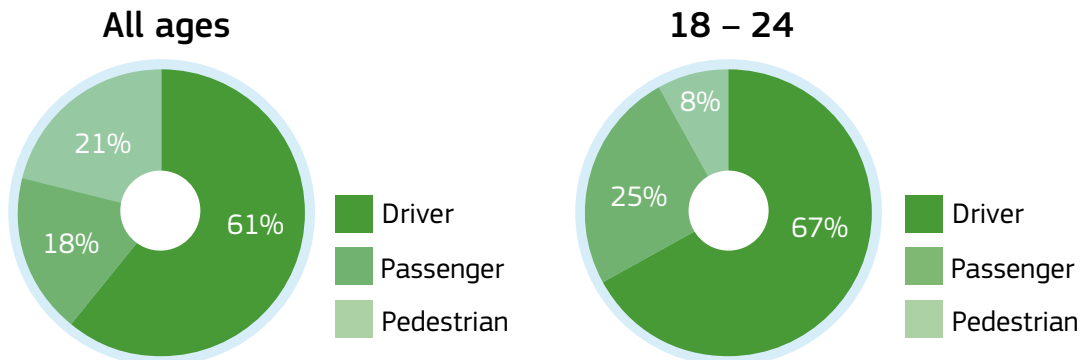
Men are still largely overrepresented among young victims: 80% of young people killed in road crashes were men. This can be explained by young men's different risk taking

behaviour and also by the fact that young men tend to take longer trips than young women do.

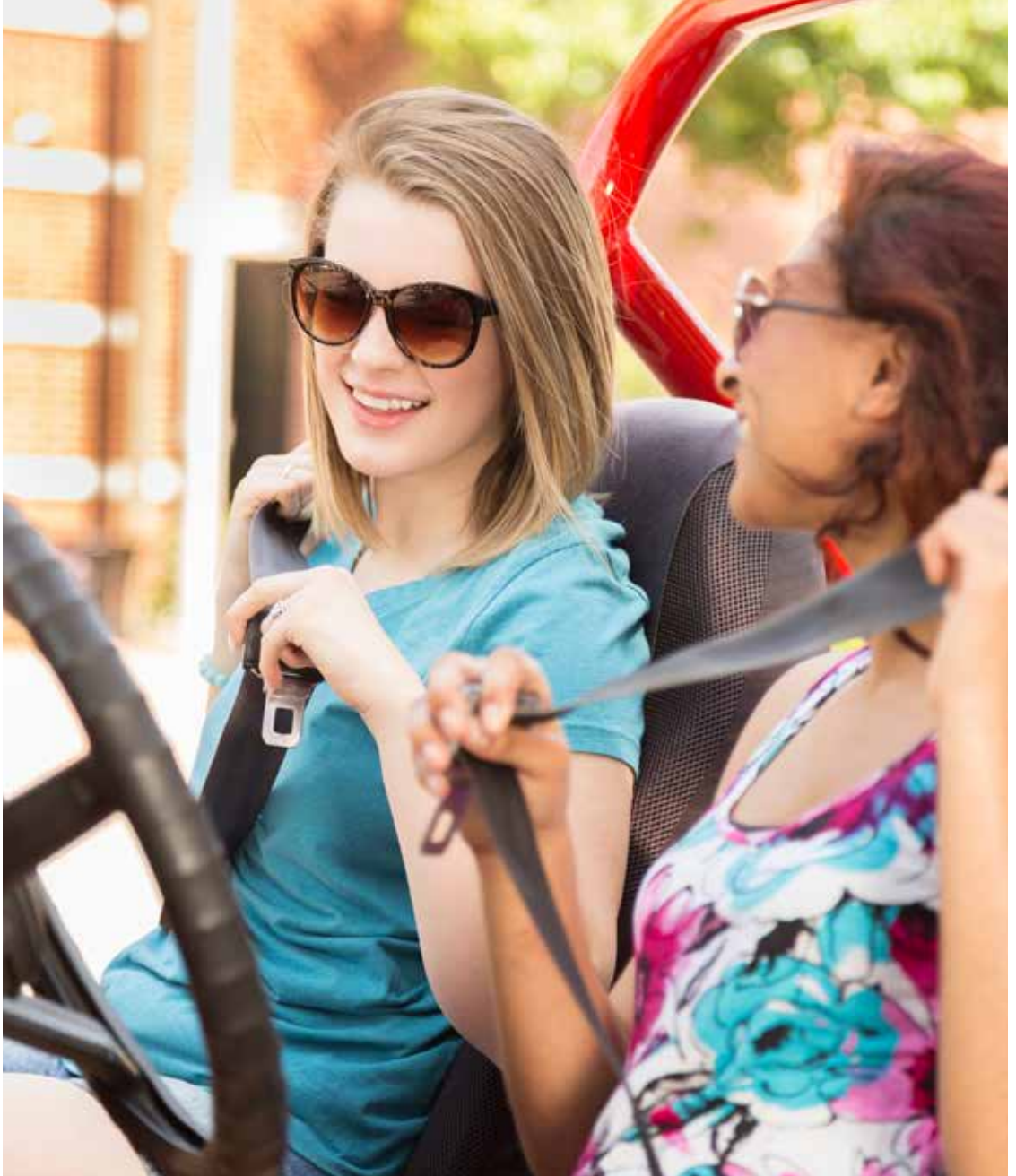
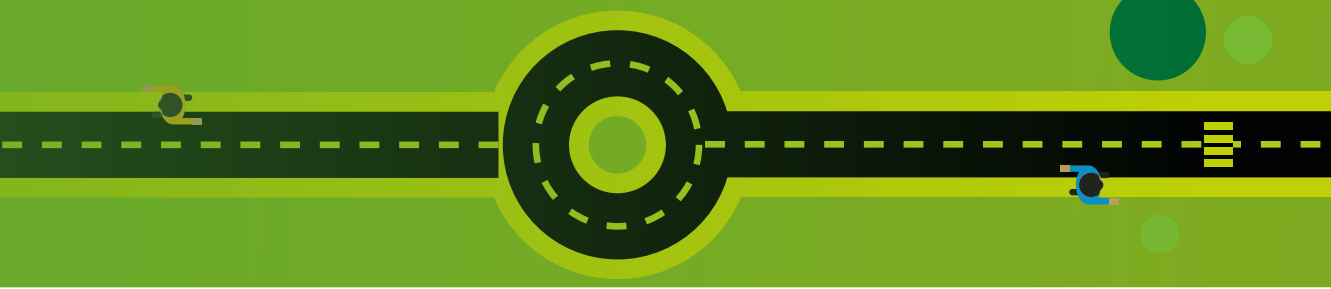
Most young people killed in road crashes were drivers (67%), while only 8% were pedestrians.

The majority (61%) of young people were killed in road crashes outside urban areas, on rural and interurban roads, and only 6% of fatalities occurred on motorways. Young people fatalities in built-up areas accounted for 32% in the EU.

## ROAD FATALITIES BY ROAD USER TYPE







# 3. The elderly

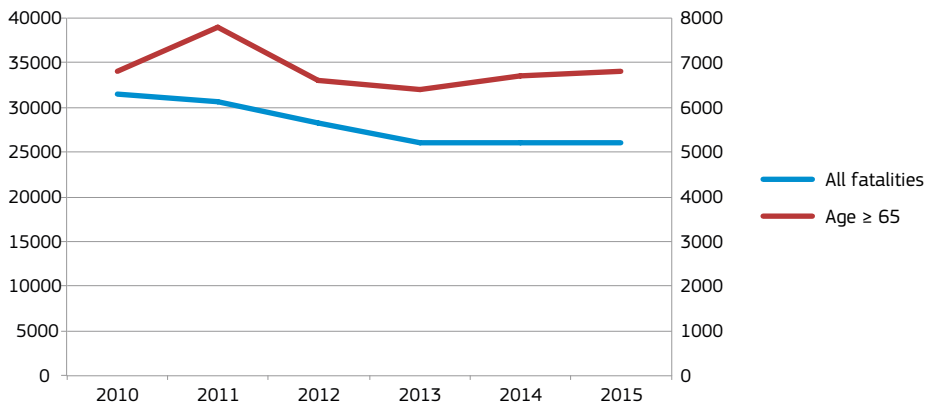
- In all EU countries, elderly people are at greater risk of being killed in a road crash than the overall population.
- Elderly people accounted for 18% of road fatalities in 2010 and 26% in 2015.
- Most elderly road victims are pedestrians (37%) and most pedestrian fatalities occur in urban areas.
- Across the EU, the fatality rate for elderly men is twice as high as the rate for elderly women.



In an aging society, the role of elderly people (65+) in road traffic requires closer attention. The proportion of elderly people in the total population is increasing and the proportion of elderly people among road traffic victims is also increasing.

Although older drivers are involved in fewer road crashes, elderly people in general are one of the highest risk groups. They are more vulnerable because they are more fragile, with often reduced eyesight and reaction speed.

## NUMBER OF ELDERLY FATALITIES AND ALL ROAD FATALITIES IN THE EU

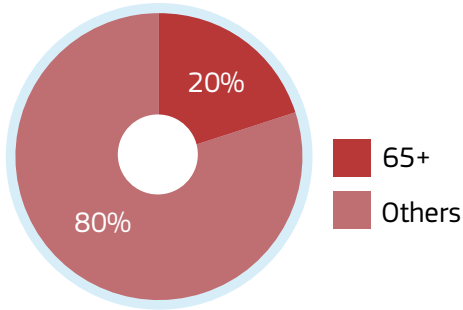


Even if the number of elderly road victims has decreased over time, the total number of road deaths has fallen faster, thus the proportion of elderly fatalities rose. While 18% of road fatalities involved elderly people in 2010, this ratio reached 26% in 2015.

Compared to the average population, the risk of being killed on roads is almost one and half times higher for an elderly road user. In general, the average age of road victims is on the rise in the EU.

## ELDERLY FACE HIGHER RISKS IN URBAN AREA

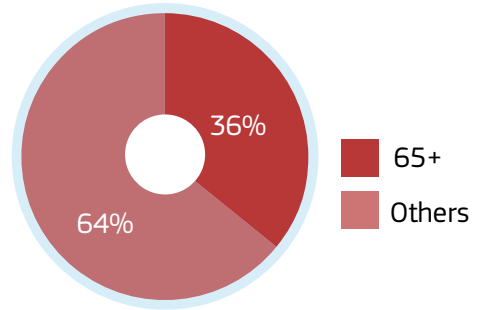
### Outside urban areas



There are fewer elderly fatalities on motorways and on rural roads, but more on urban roads. This is probably a result of the fact that most elderly road victims are pedestrians and most pedestrian fatalities occur in urban areas.

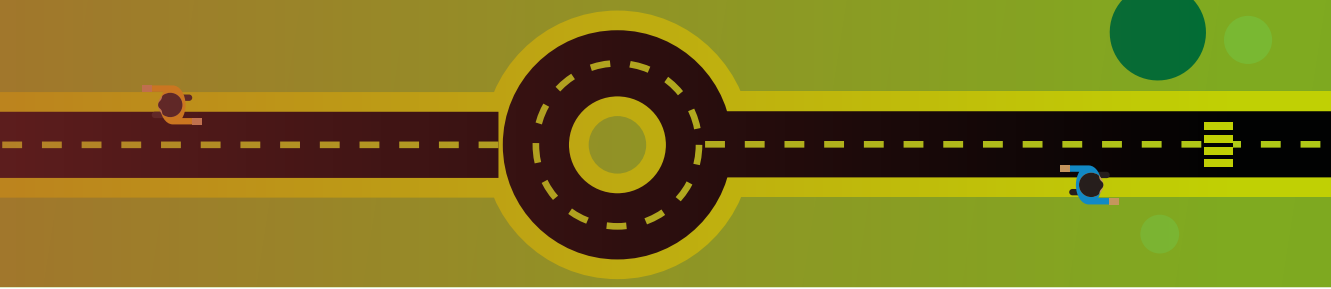
In general, people aged 65 and over are especially over-represented among pedestrians who are killed in the EU. However, there are significant differences between the Member States.

### Urban areas



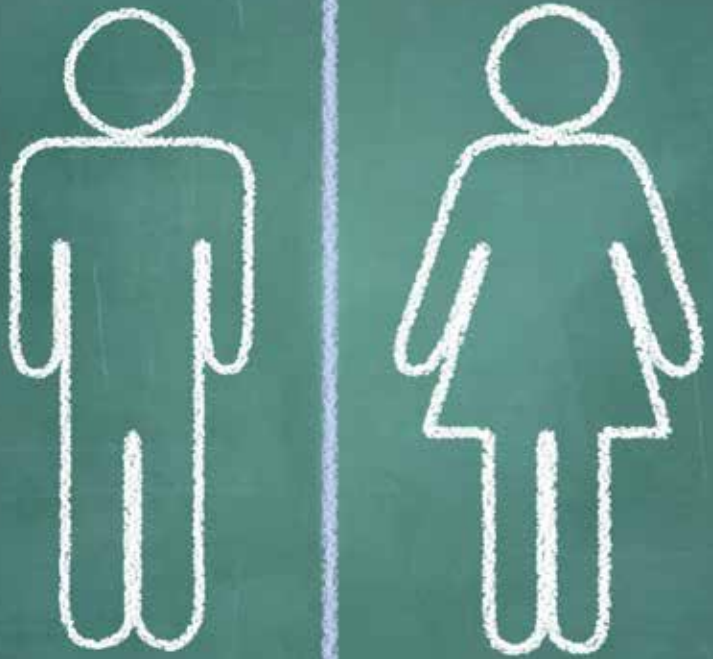
The high proportion of elderly people killed in road crashes as pedestrians also reflects their reduced mobility options.

Men are overrepresented among elderly road victims: almost two thirds of elderly people killed in a road crash were men. At the same time, women make up a higher proportion of fatalities among the elderly (36%) than within the population in general (24%).



# 4. Gender

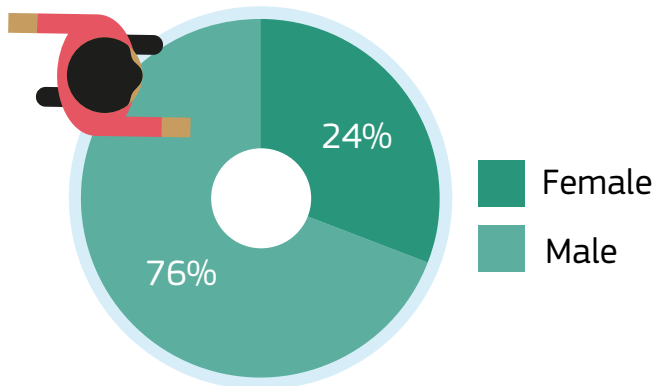
- Since 2001, fatality rates decreased for both men and women in all EU countries.
- Far more men than women are killed in road crashes: only 24% of fatalities are women, while 76% are men.
- The proportion of male drivers killed exceeds 80% in some countries.
- Women are over-represented as passengers and pedestrians among road victims.



In 2015, about 26 100 people were killed in road crashes throughout the EU, which means 5 400 fewer than in 2010. There is no difference between genders in this positive development in the EU overall: the number

of road fatalities decreased by 17% for both men and women. There are, however, many gender-related differences in individual countries.

## DISTRIBUTION OF ROAD FATALITIES BY GENDER IN THE EU



In general, far more men than women are killed in road crashes: fewer than a quarter of all fatalities are women, and 76% of fatalities are men.

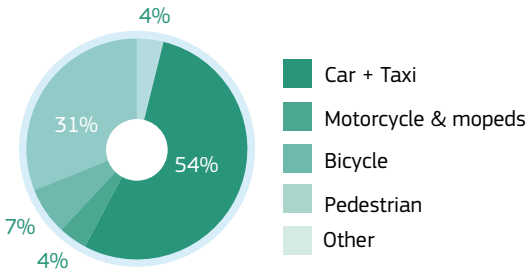
Men are still overrepresented among young victims: 80% of young people who died in road crashes were men. At the same time, the fatality rate of elderly men is over twice the rate of elderly women in most EU countries.

The ratio between male and female road victims increases with age and reaches the peak for men between the ages of 30 to 34. It then falls among older age groups. More than 80% of road fatalities aged 20 to 54 were men, and overall 76% of road victims were male. This reflects a specific gender development in the travel behaviour of men and women in Europe.

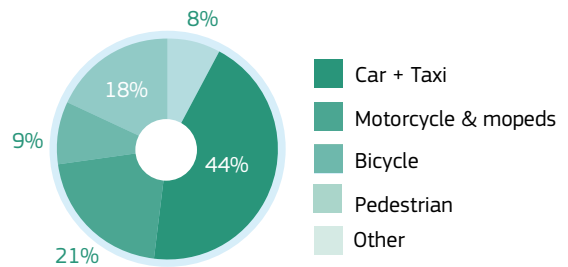


## ROAD FATALITIES BY GENDER AND MODE OF TRANSPORT

**Female fatalities**



**Male fatalities**

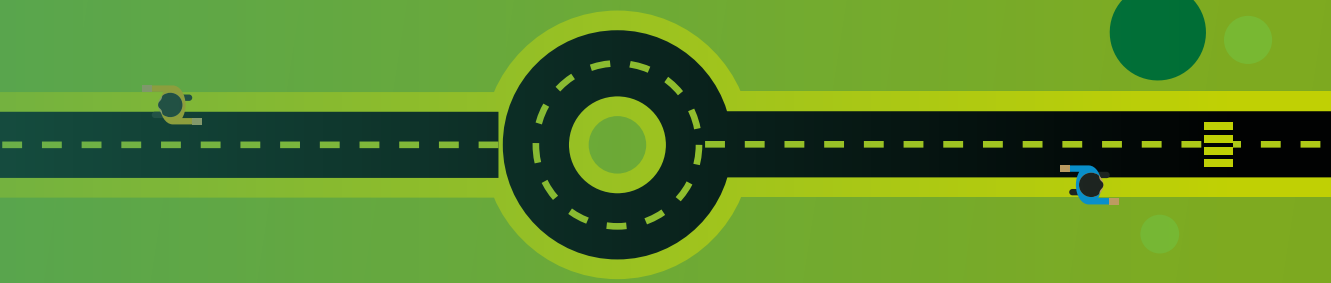


Male and female road fatality figures also differ across road user categories. In 2015, more women than men were killed in passenger cars, but far more men than women were killed while riding motorcycles. Among pedestrians, almost twice as many women were killed as men.

Among drivers, the proportion of fatalities is higher for men than for women. The proportion of men exceeds 80% in some countries. Women are overrepresented among passenger and pedestrian fatalities in all countries.







## Conclusions

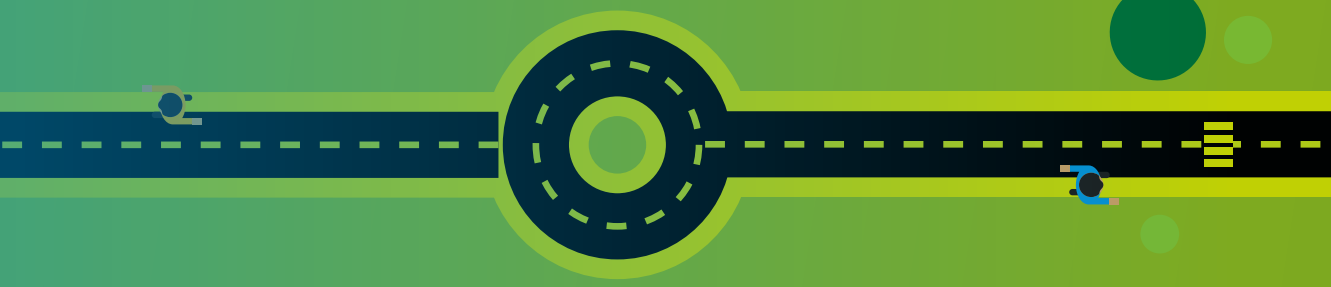
The EU has an ambitious road safety target for this decade: halving the number of road deaths between 2010 and 2020. The target is very challenging to reach but we should not give up trying. In order to make up for the stagnation in 2013-2015, fresh efforts are needed from all involved, from policy-makers to road users.

The latest road safety trends clearly show the areas in which work should be concentrated. Although the rate of road fatalities among young people has decreased over the last decade, this is not true for elderly road users. Therefore, elderly people, especially pedestrians, deserve additional attention as part of urban road safety efforts. In an aging society, it is our common responsibility to make roads safe for elderly people to use.

There are many gender-based differences in road safety trends. This reflects a specific gender development in the travel behaviour of men and women in Europe. The differences show that road users' behaviour plays a crucial part in safety, and this should be taken into account when designing new policies or raising awareness about risks on the road.

Future work includes new possibilities for analysing the non-fatal but still serious road crashes. In 2015, Member States reported the first EU-wide data on serious road injuries. Understanding the real scope of the injury problem is the first step to reducing the number of road crashes that result in serious injuries.





For more information about the European Commission and road safety, visit our website:

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

