



European
Commission



Facts & Figures
Young People



This document is part of a series of 20 Facts and Figures reports. The purpose of these Facts and Figures reports is to provide recent statistics related to a specific road safety topic, for example a specific age group or transport mode. The most recent figures in this Facts and Figures report of 2024 refer to 2022. These reports can be found on the ERSO website (https://road-safety.transport.ec.europa.eu/statistics-and-analysis/data-and-analysis/facts-and-figures_en).

Contract:	This document has been prepared in the framework of the EC Service Contract MOVE/C2/SER/2022-55/SI2.888215 with National Technical University of Athens (NTUA), SWOV Institute for Road Safety Research and Kuratorium für Verkehrssicherheit (KFV).
Version:	March 2024
Authors:	Anita Eichhorn, Eva Aigner-Breuss, Maria Fleischer, Martin Donabauer, Aggelos Soteropoulos (KFV)
Internal Review:	Frits Bijleveld (SWOV)
Referencing:	Reproduction of this document is allowed with due acknowledgement. Please refer to the document as follows: <i>European Commission (2024) Facts and Figures Main Figures. European Road Safety Observatory. Brussels, European Commission, Directorate General for Transport.</i>
Sources:	Information in this document is based largely on data in the CARE database (Community database on Accidents on the Roads in Europe). Other data are taken from Eurostat. Date of extraction: 29 January 2024

Disclaimer

Whilst every effort has been made to ensure that the matter presented in this document is relevant, accurate and up to date, the (sub)contractors cannot accept any liability for any errors or omission, or reliance on part or all of the content in another context.

Any information and views set out in this document are those of the author(s) and do not necessarily reflect the official opinion of the European Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use that may be made of the information contained therein.

© European Commission, 2024.

The EU does not own the copyright in relation to the following elements:

Cover page photos, © www.istockphoto.com

Contents

1.	Key facts.....	4
2.	Summary	5
3.	Main trends	7
3.1	Absolute number of road fatalities.....	7
3.2	Mortality rate: number of road fatalities per million inhabitants	9
3.3	Share of fatalities among young people in the total number of road fatalities.....	14
3.4	Trend in the number of fatalities.....	17
3.5	Comparison with other age groups.....	23
4.	Road user	26
4.1	Gender	26
4.2	Transport modes involved	29
5.	Location.....	34
5.1	Road type.....	34
5.2	Junction	37
6.	Type of collision	38
7.	Time	39
7.1	Period of the week	39
7.2	Day of the week, time of the day and hour	39
7.3	Weather.....	40
8.	Notes	41
8.1	Definitions	41
8.2	Data source	42
8.3	Small cells.....	42
8.4	Missing data.....	43
8.5	Data cleaning.....	43

1. Key facts

This Facts and Figures report looks at road fatalities among young people on European roads. Young people are persons aged 15 to 24 years. All observations reported were derived from the available data, the statistical significance of differences or relations between values has not been tested.

Road fatalities among young people, 2022
Young people aged 15-17 **Young people aged 18-24**

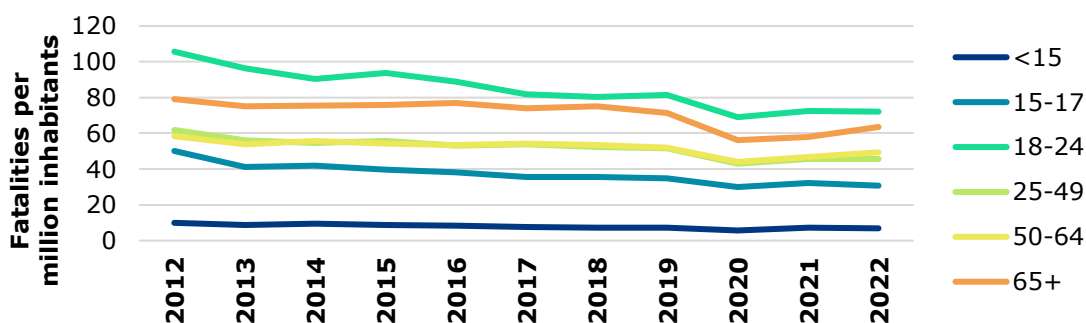


429 fatalities (2% of all fatalities)

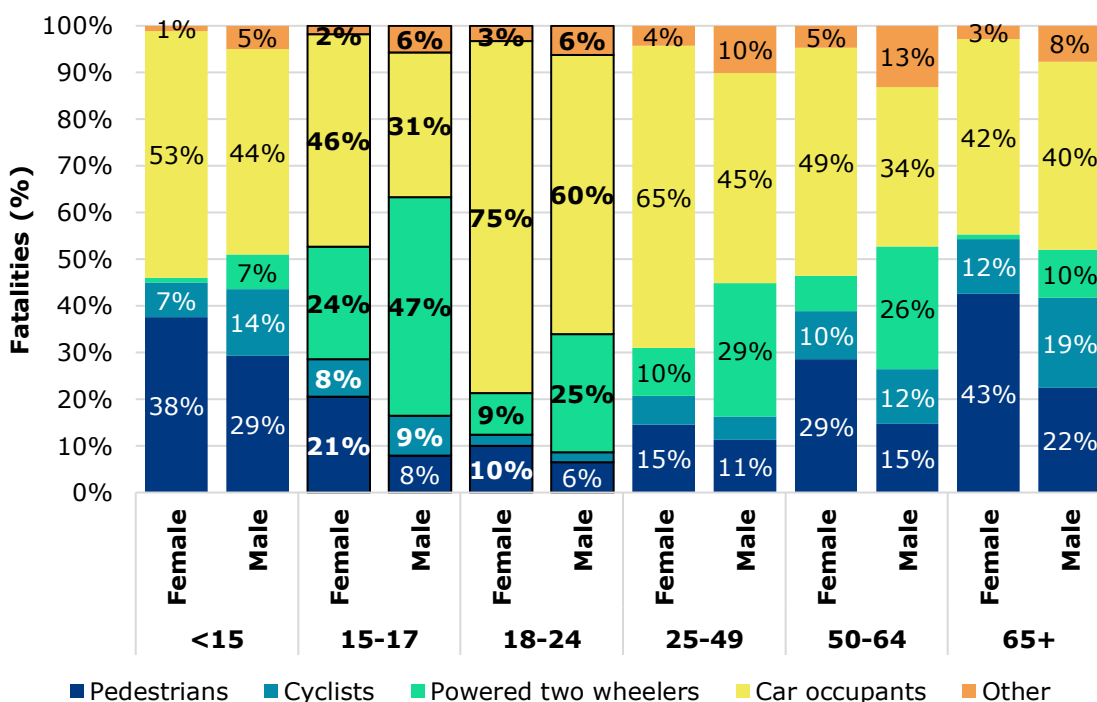


2,388 fatalities (12% of all fatalities)

Mortality



Transport mode



2. Summary

This Facts and Figures report examines the number of fatalities among **young people aged 15-24**. They are categorised into two groups:

- **Young people aged 15-17** that begin to acquire access to various modes of transportation and gradually become more independent. They have the opportunity to use motorised vehicles, such as **mopeds**.
- In **most EU Member States, a (car) driving license** can be obtained **at the age of 18**. Therefore, young people aged **18-24** are even **more mobile than those aged 15-17**, and they are considerably more susceptible to being involved in road crashes compared to any other age group.

Road fatalities among young people aged 15-17:

The **absolute number of fatalities** among **young people aged 15-17 between 2012 and 2022 decreased by 39%** to 429 fatalities in 2022. The relative share remained constant throughout this time period. In 2022, the **mortality rate for this age group was the second lowest** among all age groups and has decreased by 38% in the period 2012-2022.

Road fatalities among young people aged 15-17 in 2022 also differed in other respects when compared to fatalities of people aged 25+:

- Fatalities in this age group happened more often with mopeds (20% versus 3%) and motorcycles (21% versus 19%).
- Fatalities in this age group occurred more often during the weekend at night-time (22% versus 9%).
- The proportion of road fatalities on motorways was lower (5% versus 9%).

Road fatalities among young people aged 18-24:

The **absolute number of fatalities** among **young people aged 18-24 decreased by 38% between 2012 and 2022** to 2,388 fatalities in 2022. The relative share decreased from 15% to 12% in the same time period. Between 2012 and 2022 the **mortality rate for this age group has decreased by 32%**. However, they are still the highest among all age groups. Road fatalities among young people aged 18-24 in 2022 also differed in other respects when compared to fatalities of people aged 25+:

- Fatalities in this age group happened more often as car occupants (63% versus 43%)
- Fatalities in this age group occurred more often during the weekend at night-time (24% versus 9%).
- The proportion of road fatalities on rural roads is higher (60% versus 52%)

COVID-19 pandemic

The impact of the global COVID-19 pandemic on the CARE data for 2020 and 2021 is evident. Overall traffic volumes dropped sharply during the pandemic, which was associated with a significant drop in road traffic crashes and fatalities. However, the pattern was not homogeneous throughout the EU-27. For example, the number of fatalities actually increased in three Member States in 2020 during COVID-19. Therefore, the impact varied from country to country and there were also behavioural changes - for example there is some evidence of increased speeding. Further research is needed to understand the impact of the pandemic on road safety.

Comparisons with other age groups

Please note that both age groups are compared with persons aged 25 and above.

More detailed data:

This Facts and Figures report is accompanied by an Excel file (available online) containing detailed data. Each sheet in the Excel file corresponds to a Figure/Table in the report.

3. Main trends

3.1 Absolute number of road fatalities

Table 1. Fatalities among young people aged 15-17 per country in the EU27 and EFTA (2012-2022). Source: CARE

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	LT*	ST*
Belgium	19	9	16	17	10	12	9	11	10	7	8	-58%	-27%
Bulgaria	16	17	20	12	18	19	13	12	13	23	17	6%	42%
Czechia	17	10	11	4	9	4	7	9	3	7	8	-53%	-
Denmark	6	6	3	4	2	1	6	6	10	2	5	-	-
Germany	113	89	91	72	83	78	77	66	64	64	63	-44%	-5%
Estonia	1	2	2	4	1	1	-	-	-	2	2	-	-
Ireland	7	4	6	3	3	4	4	2	-	-	-	-	-
Greece	21	27	19	19	16	17	12	14	9	13	-	-38%	-7%
Spain	32	20	23	27	23	29	25	34	21	26	27	-17%	-21%
France	131	102	116	125	95	101	105	86	77	87	82	-37%	-5%
Croatia	10	10	5	7	4	4	4	8	5	7	3	-	-
Italy	85	69	70	57	66	68	61	67	47	63	68	-20%	2%
Cyprus	2	-	2	1	6	2	3	2	-	-	-	-	-
Latvia	5	1	3	6	5	1	4	-	2	-	-	-	-
Lithuania	-	4	9	6	3	1	4	1	4	4	1	-	-
Luxembourg	2	-	-	2	-	1	-	-	2	-	1	-	-
Hungary	11	14	7	9	8	8	4	9	6	7	6	-46%	-
Malta	-	-	-	-	1	-	-	-	-	-	-	-	-
Netherlands	13	14	17	15	9	13	15	15	11	18	19	46%	27%
Austria	24	14	16	17	15	20	10	13	9	21	12	-50%	-8%
Poland	87	83	71	67	74	46	64	50	52	32	31	-64%	-38%
Portugal	10	8	11	8	7	6	12	10	7	9	7	-	-
Romania	52	40	37	40	51	30	26	34	30	21	29	-44%	-15%
Slovenia	2	2	1	4	3	3	1	2	3	3	1	-	-
Slovakia	-	-	-	-	7	11	8	10	3	5	2	-	-
Finland	14	12	12	7	8	12	12	10	14	12	-	-14%	-
Sweden	10	7	7	9	6	2	9	5	8	-	-	-	-
EU	701	571	582	549	533	494	495	476	412	445	429	-39%	-10%
Iceland	-	3	1	-	2	-	-	1	-	-	-	-	-
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-
Norway	6	6	4	2	3	2	3	1	2	5	1	-	-
Switzerland	6	2	2	4	4	7	5	3	5	3	4	-	-

*LT = Long term change of last available year over 2012.

*ST = Short term change of last available year over 2019.

In 2022 France, Germany and Italy are the countries with the highest number of fatalities among young people aged 15-17 in the EU. Regarding fatalities among young people aged 18-24, also France, Italy and Germany are the countries with the highest number of fatalities in the EU.

Table 2. Fatalities among young people aged 18-24 per country in the EU27 and EFTA (2012-2022). Source: CARE

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	LT*	ST*
Belgium	132	124	111	104	88	77	65	87	61	62	63	-52%	-28%
Bulgaria	95	85	84	97	79	64	59	78	55	59	45	-53%	-42%
Czechia	96	96	100	103	65	68	78	81	55	54	49	-49%	-40%
Denmark	31	25	22	32	31	33	17	23	18	23	17	-45%	-26%
Germany	611	493	496	473	435	394	369	363	326	287	300	-51%	-17%
Estonia	17	8	13	5	14	3	5	5	6	5	2	-88%	-
Ireland	35	36	28	37	31	22	22	23	-	-	-	-	-
Greece	143	112	114	112	101	93	81	76	75	86	-	-40%	13%
Spain	175	145	130	144	176	171	184	138	114	173	167	-5%	21%
France	753	636	582	619	596	562	503	549	449	504	549	-27%	0%
Croatia	48	58	36	45	42	48	40	43	46	41	39	-19%	-9%
Italy	423	404	369	379	352	306	353	339	236	302	332	-22%	-2%
Cyprus	10	18	12	11	5	8	8	6	10	10	10	-	-
Latvia	16	14	30	20	18	15	13	9	16	-	-	-	-
Lithuania	-	41	33	29	19	17	25	28	18	15	18	-	-36%
Luxembourg	6	5	5	5	3	5	9	6	2	8	2	-	-
Hungary	42	50	59	61	47	44	52	49	39	43	47	12%	-4%
Malta	-	-	-	2	2	3	4	1	2	2	-	-	-
Netherlands	76	81	69	70	75	57	70	87	69	67	72	-5%	-17%
Austria	84	56	59	72	56	46	41	45	43	41	39	-54%	-13%
Poland	585	551	499	446	440	378	375	383	374	275	212	-64%	-45%
Portugal	65	65	53	47	54	48	69	74	49	51	68	5%	-8%
Romania	231	220	177	207	195	196	163	152	134	171	141	-39%	-7%
Slovenia	19	22	9	16	21	11	15	8	9	12	3	-84%	-
Slovakia	-	-	-	-	48	38	28	30	31	27	29	-	-3%
Finland	41	36	32	48	41	33	31	31	23	27	-	-34%	-13%
Sweden	41	40	25	35	31	40	30	19	30	-	-	-	-
EU	3,866	3,471	3,197	3,267	3,065	2,780	2,709	2,733	2,313	2,414	2,388	-38%	-13%
Iceland	2	2	1	5	-	3	4	-	-	-	2	-	-
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-
Norway	20	29	18	31	20	11	14	18	16	12	16	-20%	-11%
Switzerland	39	30	38	35	26	31	19	14	18	23	30	-23%	114%

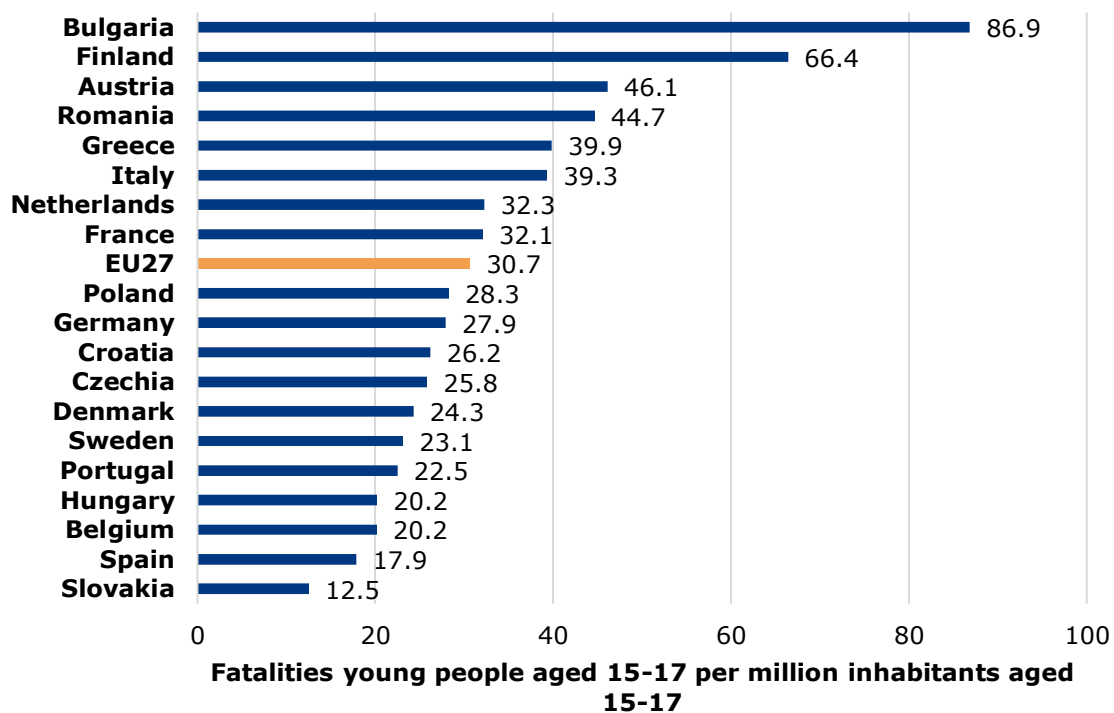
*LT = Long term change of last available year over 2012.

*ST = Short term change of last available year over 2019.

3.2 Mortality rate: number of road fatalities per million inhabitants

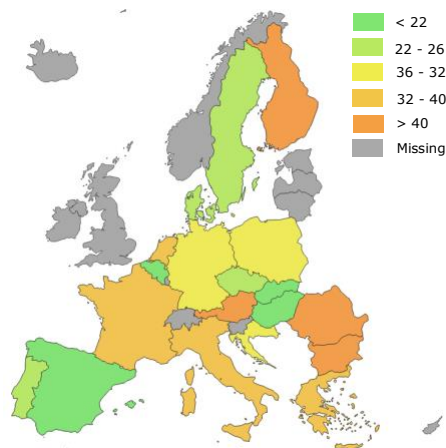
The number of fatalities among young people aged 15-17 per million inhabitants of the same age is above the EU average (30.7) in Bulgaria, Finland, Austria, Romania, Greece, Italy, the Netherlands and France (from 32 to nearly 87).

Figure 1. Fatalities among young people aged 15-17 per million inhabitants aged 15-17 per country in the EU27 and EFTA (2022). Source: CARE, EUROSTAT



Notes:

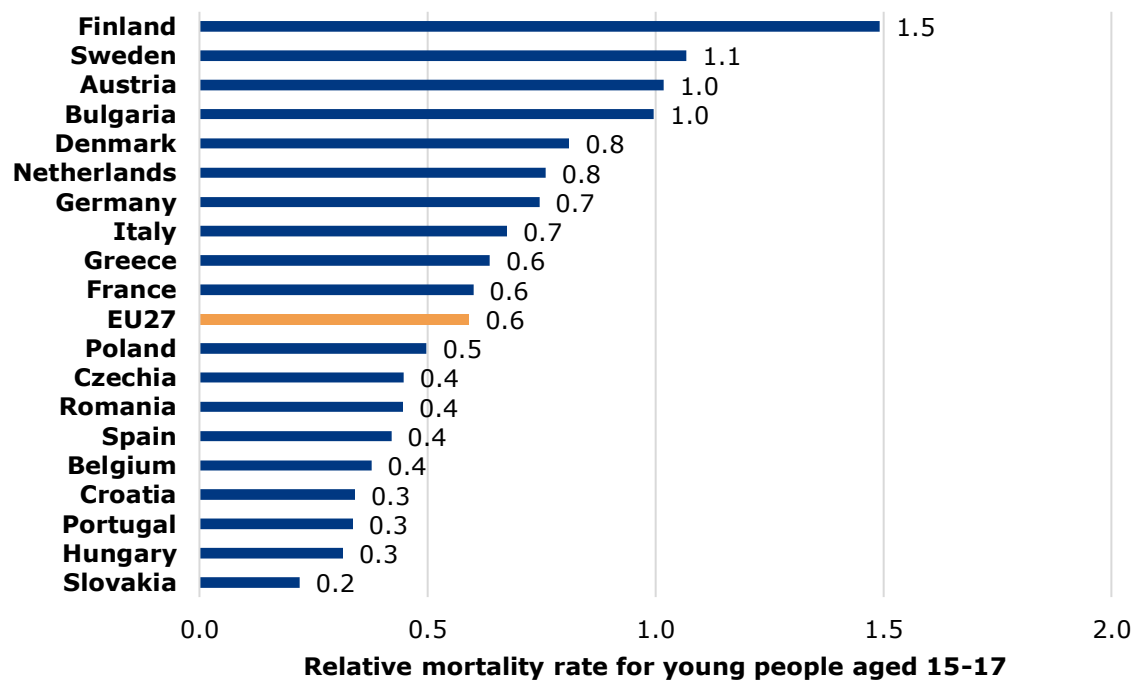
- Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Slovenia, Iceland, Liechtenstein, Norway and Switzerland are not included in the figure because there are fewer than 10 fatalities on the year 2022.
- For Greece, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.



© Eurostat for the administrative boundaries

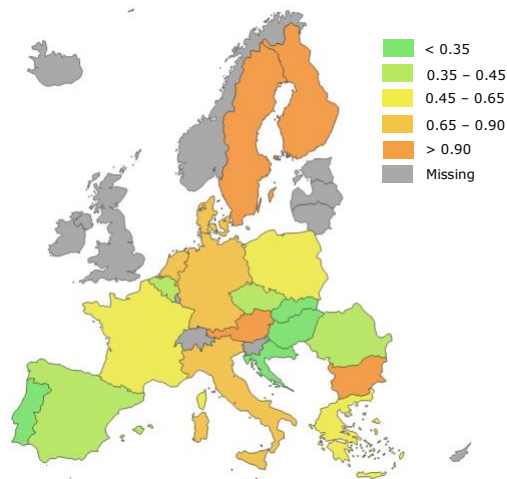
The relative mortality rate is calculated by dividing the mortality rate for young people aged 15-17 by the mortality rate of the reference group 25+. **The relative mortality rate for young people aged 15-17 is 0.6, which means that they are less likely to be killed on the road compared to the reference group 25+.** There are however differences between the Member States: **young people in this age group are considerably more likely to be killed on roads in Finland, Sweden, Austria and Bulgaria.**

Figure 2. Relative mortality rate for young people aged 15-17 per by country in the EU27 and EFTA (2022). Source: CARE



Notes:

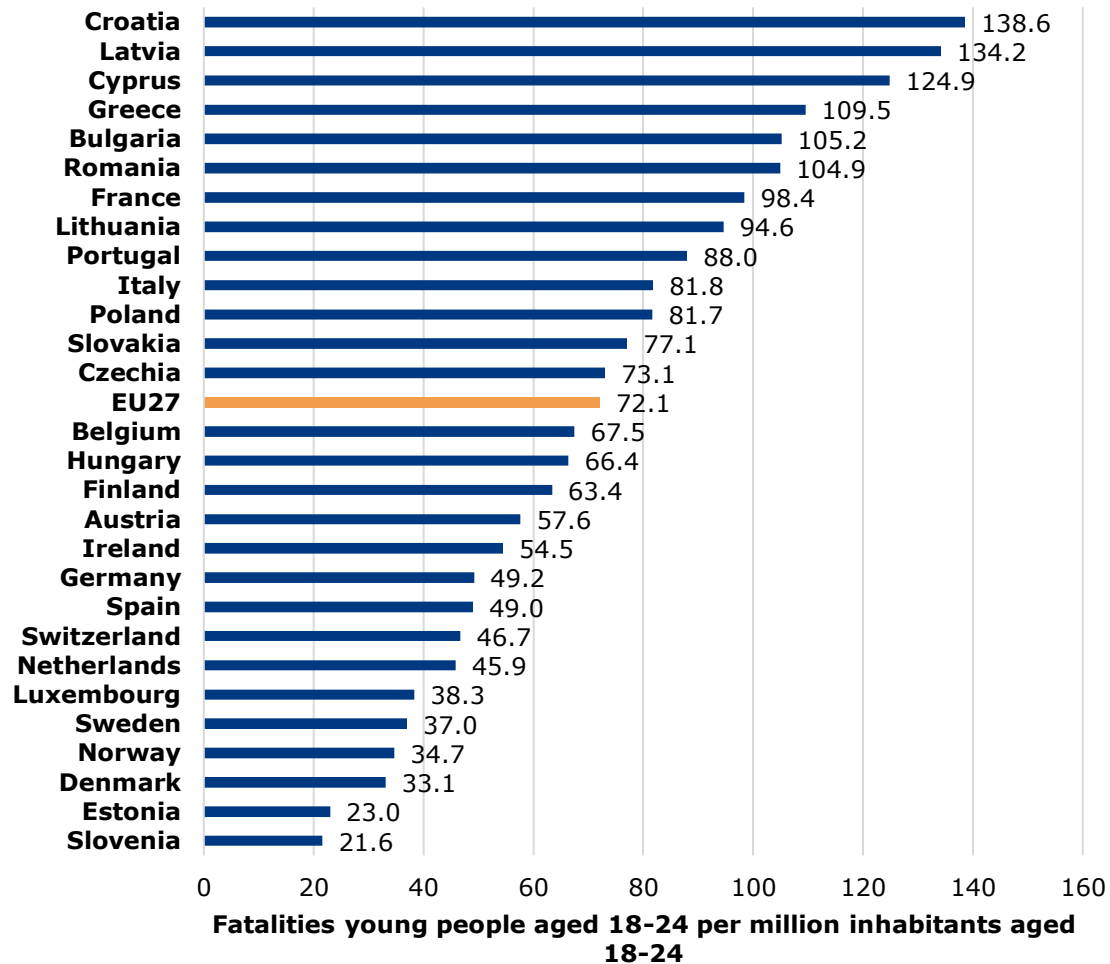
- Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Slovenia, Iceland, Liechtenstein, Norway and Switzerland are not included in the figure because there are fewer than 10 fatalities on the year 2022.
- For Greece, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.



© Eurostat for the administrative boundaries

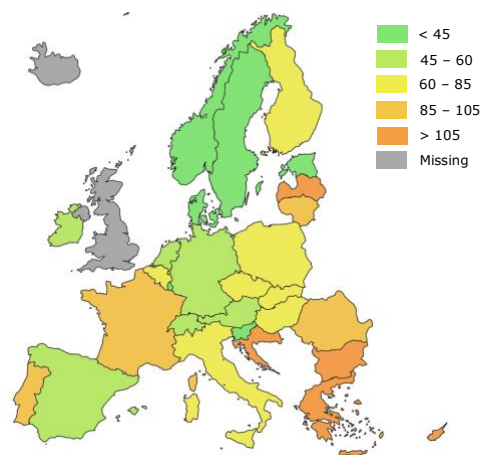
The **number of fatalities among young people aged 18-24 per million inhabitants is above the EU average (72.1) in several EU Member States.** Especially, Croatia, Latvia, Cyprus, Greece, Bulgaria and Romania are well above the EU average with mortality rates of more than 100.

Figure 3. Fatalities among young people aged 18-24 per million inhabitants aged 18-24 per country in the EU27 and EFTA (2022).
Source: CARE, EUROSTAT



Notes:

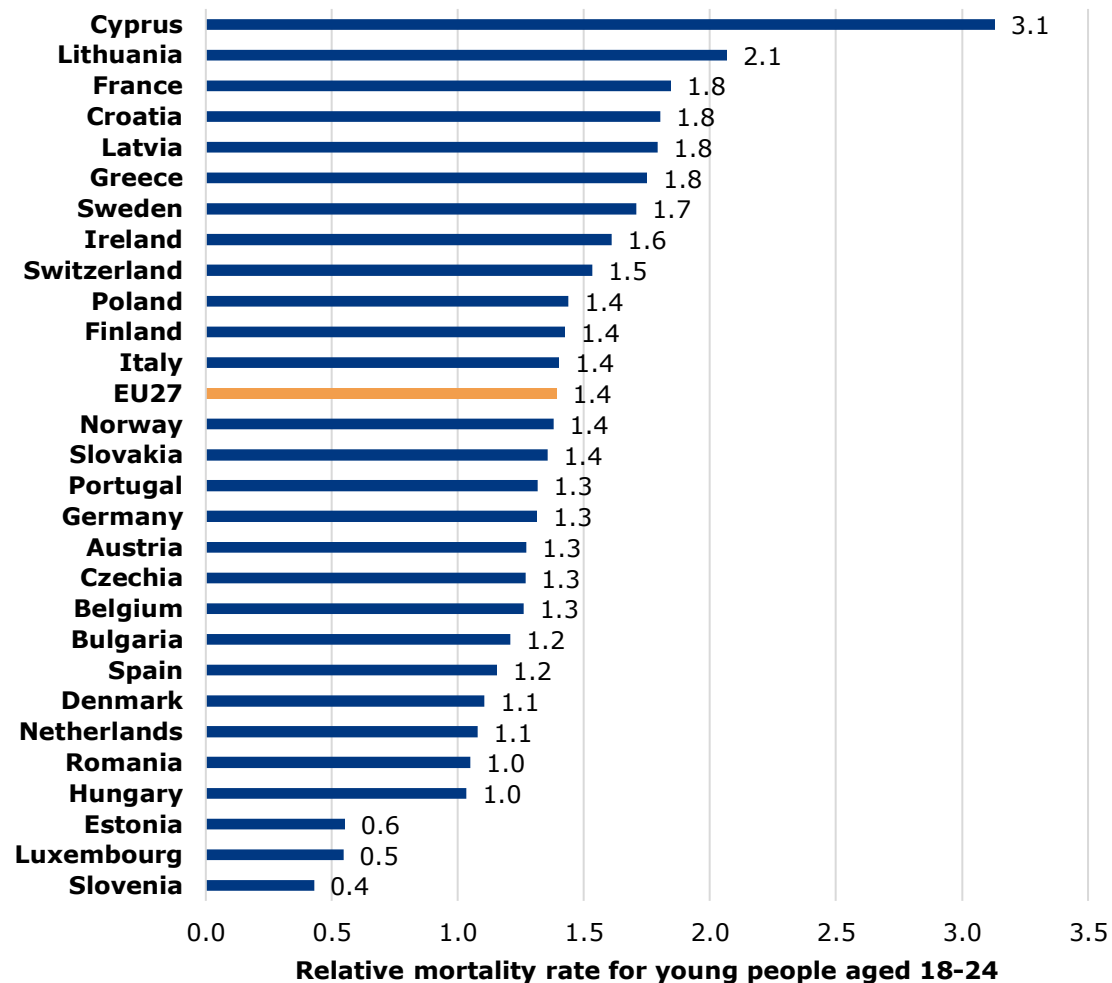
- Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- For Ireland, Greece, Latvia, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.



© Eurostat for the administrative boundaries

The **relative mortality rate for young people aged 18-24 in Europe is 1.4**, which means that young people in this age group are **more likely to be killed on the road compared to the reference group 25+**. This rate is highest in Cyprus and Lithuania and lowest in Slovenia, Luxembourg and Estonia.

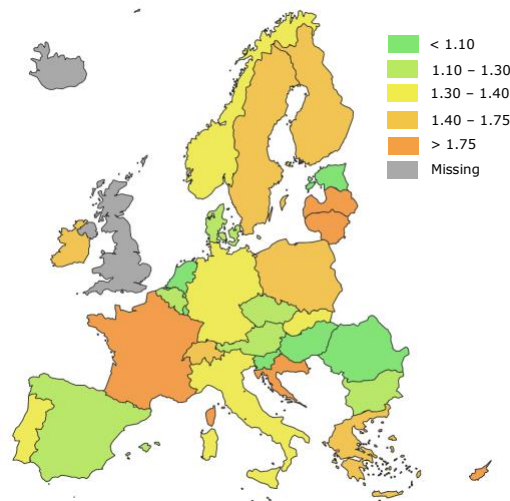
Figure 4. Relative mortality rate for young people aged 18-24 per by country in the EU27 and EFTA (2022). Source: CARE, EUROSTAT



Notes:

- Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the year 2022.

- For Ireland, Greece, Latvia, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.



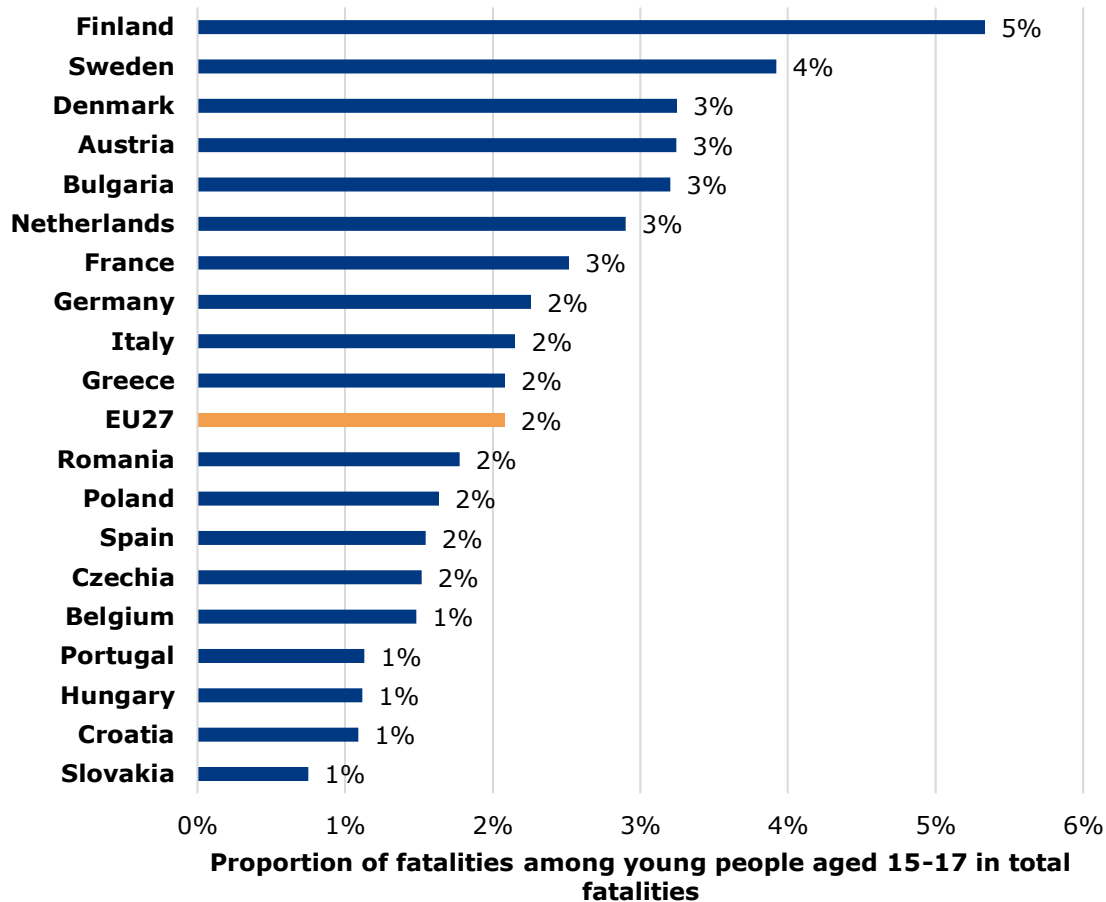
© Eurostat for the administrative boundaries

3.3 Share of fatalities among young people in the total number of road fatalities

The mortality rate is an important indicator but does not consider differences in the general road safety performance across countries. In simpler terms, it is possible for the mortality rate among young people to be high because the overall mortality rate for all age groups is high. Therefore, it is crucial to also examine the proportion or percentage of young people killed within the total number of road fatalities.

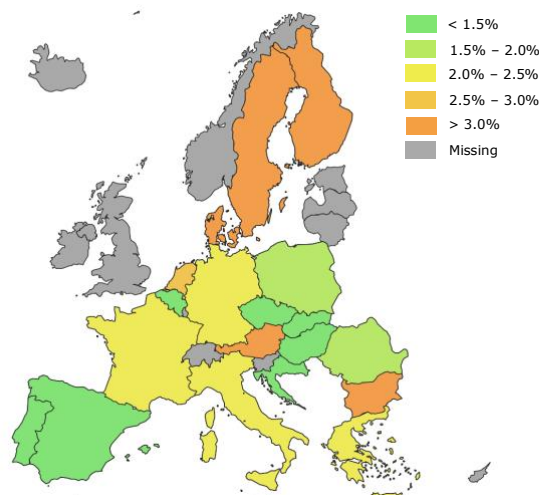
It turns out that those countries with the highest relative mortality rates (Finland, Sweden, Austria and Bulgaria) are also among those countries with the highest proportions of fatalities. Those three countries with the lowest relative mortality rate (Slovakia, Hungary and Portugal) are also among those countries with the lowest proportion of fatalities.

Figure 5. Proportion of fatalities among young people aged 15-17 in the total number of fatalities, per by country in the EU27 and EFTA (2022). Source: CARE



Notes:

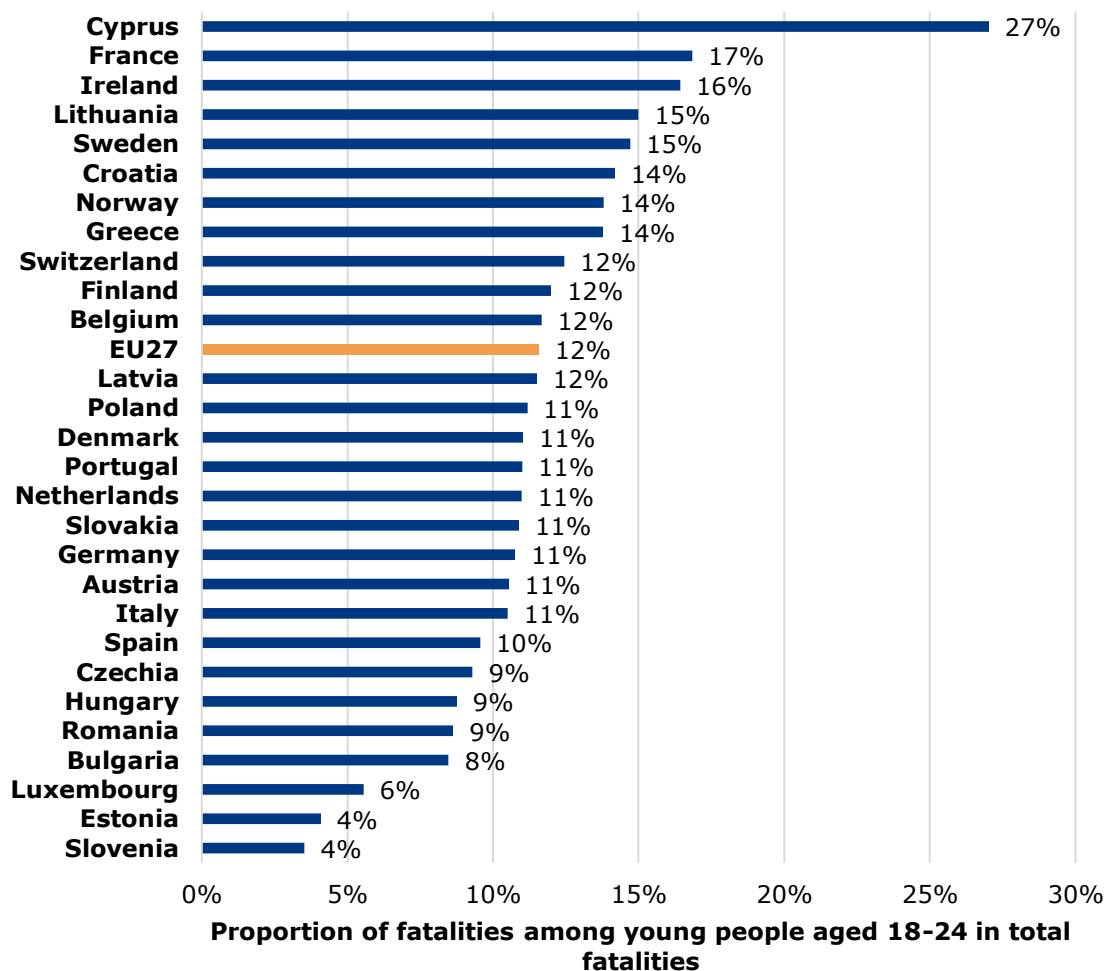
- Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Slovenia, Iceland, Liechtenstein, Norway and Switzerland are not included in the figure because there are fewer than 10 fatalities on the year 2022.
- For Greece, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.



© Eurostat for the administrative boundaries

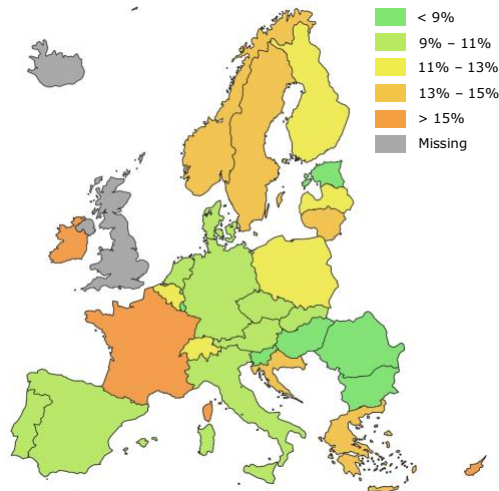
The findings for young people aged 18-24 are generally consistent with those of 15-17-year-olds. Those countries with the highest relative mortality rates can mostly be found among those with the highest proportions of fatalities as well. Conversely, countries with lower relative mortality rates also have lower proportions of fatalities.

Figure 6. Proportion of fatalities among young people aged 18-24 in the total number of fatalities, per by country in the EU27 and EFTA (2022). Source: CARE



Notes:

- Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- For Ireland, Greece, Latvia, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.

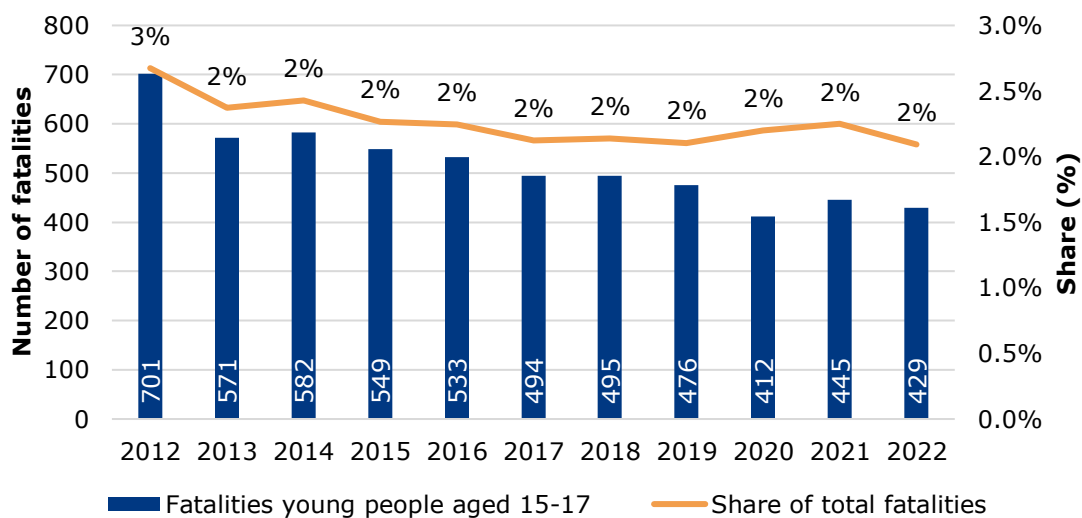


© Eurostat for the administrative boundaries

3.4 Trend in the number of fatalities

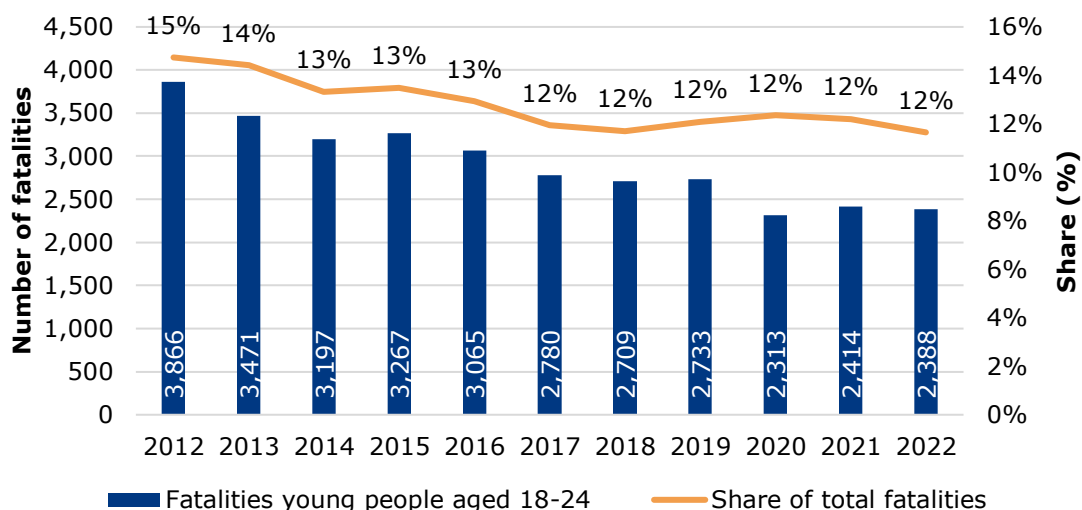
The **number of fatalities for young people aged 15-17 decreased by 39%** in the time period 2012-2022. The share of fatalities for this age group remained constant at 2% over the past 10 years.

Figure 7. Annual number of fatalities among young people aged 15-17, and their share in the total number of fatalities in the EU27 and EFTA (2012-2022). Source: CARE



The **number of fatalities among young people aged 18-24 has decreased by 38%** between 2012 and 2022. The share of fatalities for this age group has decreased from 15% in 2012 to 12% in 2022.

Figure 8. Annual number of fatalities among young people aged 18-24, and their share in the total number of fatalities in the EU27 and EFTA (2012-2022). Source: CARE



The number of fatalities has decreased in all age groups between 2012 and 2022. The total number of road fatalities decreased by 22% in the period 2012-2022. **The most remarkable positive developments can be observed in the age groups of 15-24-year-olds.**

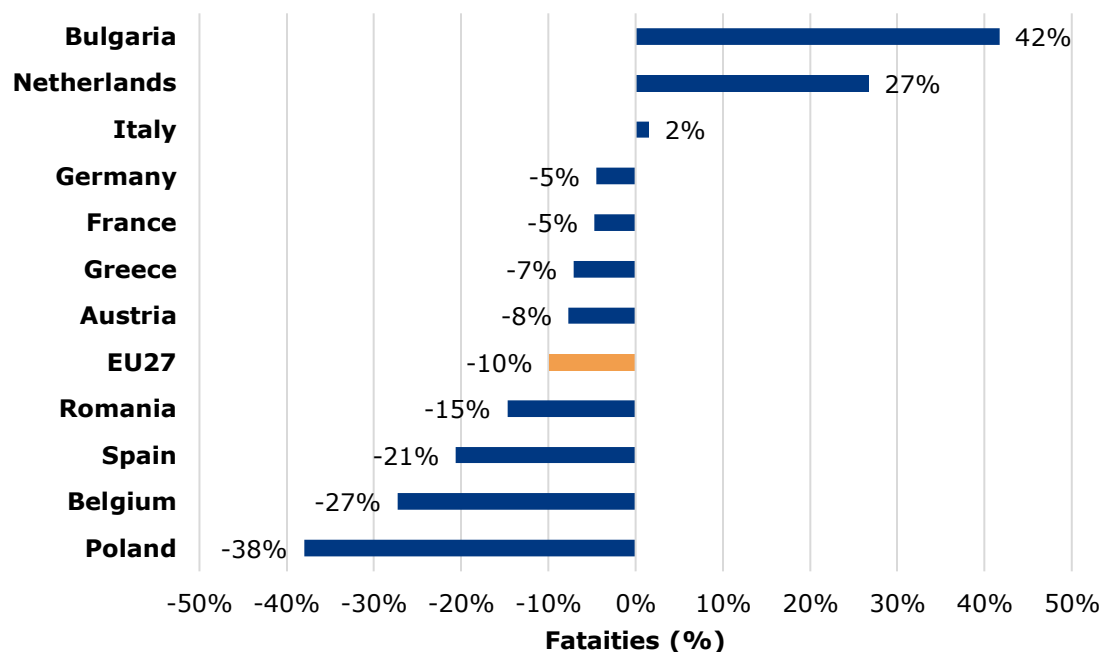
Table 3. Annual number of fatalities by age categories in the EU27 (2012-2022). Source: CARE

	2012	2019	2020	2021	2022	LT*
<15	675	489	384	482	450	-33%
15 - 17	701	476	412	445	429	-39%
18 - 24	3,866	2,733	2,313	2,414	2,388	-38%
25 - 49	9,607	7,650	6,346	6,666	6,620	-31%
50 - 64	5,097	4,815	4,096	4,364	4,620	-9%
65+	6,282	6,447	5,167	5,415	5,992	-5%
Total	26,379	22,610	18,718	19,786	20,499	-22%

*LT = Long term change of last available year over 2012.

The trend in the number of fatalities among young people for individual EU countries is calculated by analysing the short-term changes (2019-2022). **Using this trend indicator**, an overall **decrease in fatalities of 10%** in the EU27 can be seen. However, it should be taken into account that the **fatality numbers per country in the age group of 15 to 17 years are very low**. Hence, the changes observed may be subject to random fluctuations. An example is Denmark, where the numbers of fatalities have been in a single digit range except for the year 2020 (Table 1).

Figure 9. Percentage short term change in the number of fatalities among young people aged 15-17 per country in the EU27 and EFTA (2019-2022). Source: CARE



Notes:

- Estonia, Ireland, Croatia, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Portugal, Slovenia, Slovakia, Iceland, Liechtenstein, Norway and Switzerland are not included in the figure because there are fewer than 10 fatalities in the time series 2019- 2022.
- Finland and Sweden are not included in the figure because there is no data on fatalities in the year 2021 or 2022.
- For Greece the missing value for 2022 was imputed with the last known value in the series.
- For some countries with comparatively low numbers of fatalities, caution is required when interpreting the data due to considerable annual fluctuations.

Table 4. Number of and trend in fatalities among young people aged 15-17 per country in the EU27 and EFTA (2012-2022). Source: CARE

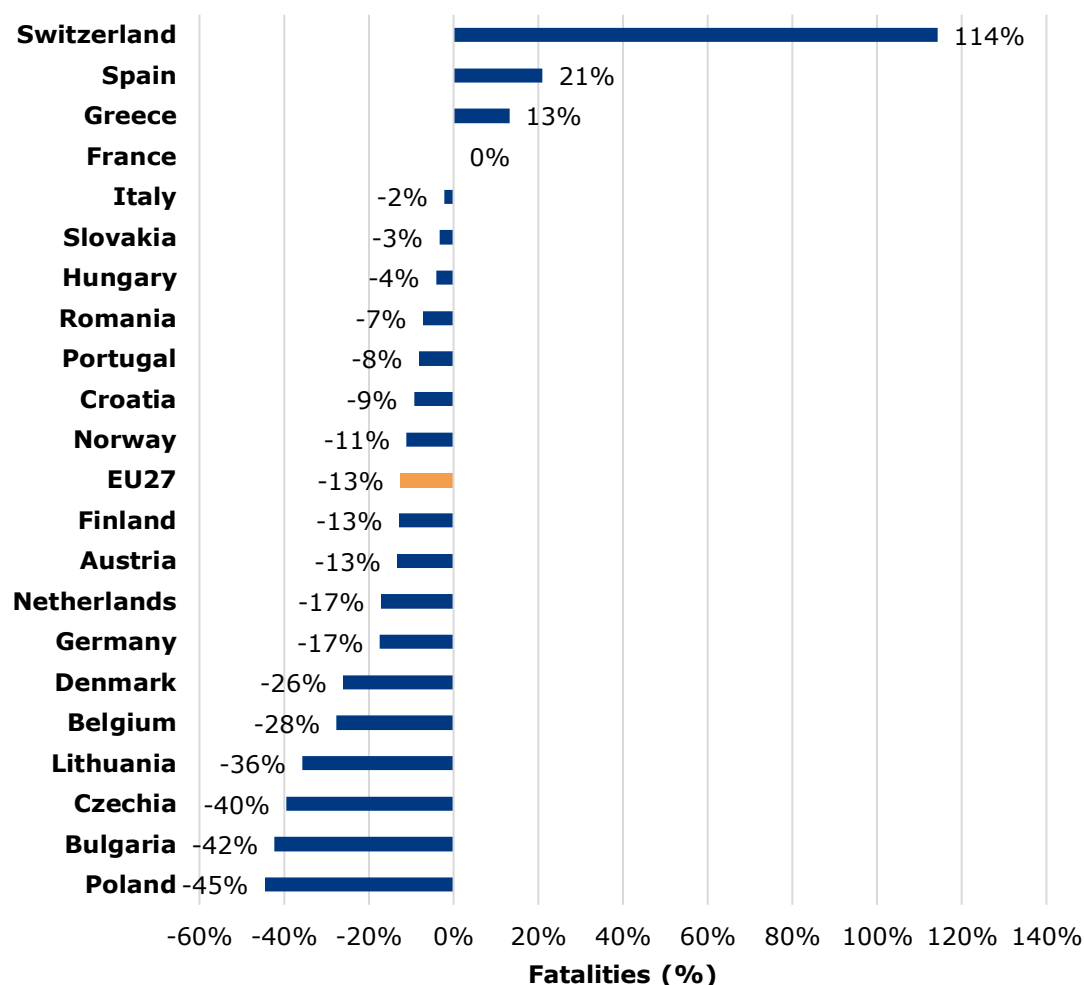
	2012	2019	2020	2021	2022	ST*	Miniplot: trend since 2012
Belgium	19	11	10	7	8	-27%	
Bulgaria	16	12	13	23	17	42%	
Czechia	17	9	3	7	8	-	
Denmark	6	6	10	2	5	-	
Germany	113	66	64	64	63	-5%	
Greece	21	14	9	13	-	-7%	
Spain	32	34	21	26	27	-21%	
France	131	86	77	87	82	-5%	
Croatia	10	8	5	7	3	-	
Italy	85	67	47	63	68	2%	
Hungary	11	9	6	7	6	-	
Netherlands	13	15	11	18	19	27%	
Austria	24	13	9	21	12	-8%	
Poland	87	50	52	32	31	-38%	
Portugal	10	10	7	9	7	-	
Romania	52	34	30	21	29	-15%	
Slovakia	-	10	3	5	2	-	
Finland	14	10	14	12	-	-	
Sweden	10	5	8	-	-	-	
EU27	701	476	412	445	429	-10%	

Notes:

- Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Slovenia, Iceland, Liechtenstein, Norway and Switzerland are not included in the table because there are fewer than 10 fatalities on the year 2022.

The **trend indicator** (analysing the short-term changes 2019-2022) for **young people aged 18-24** shows a **decrease in fatality rates by 13% (EU 27)**. However, when interpreting the trend, the small absolute numbers of certain countries must be taken into account as well. For instance, in Luxembourg, the fatalities remained in the single digits throughout the years 2019-2022.

Figure 10. Percentage short term change in the number of fatalities among young people aged 18-24 per country in the EU27 and EFTA (2019-2022). Source: CARE



Notes:

- Estonia, Cyprus, Luxembourg, Malta, Slovenia, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- Ireland, Latvia and Sweden are not included in the figure because there is no data on fatalities in the year 2021 or 2022.
- For Greece and Finland the missing value for 2022 was imputed with the last known value in the series.
- For some countries with comparatively low numbers of fatalities, caution is required when interpreting the data due to considerable annual fluctuations.

Table 5. Number of and trend in fatalities among young people aged 18-24 per country in the EU27 and EFTA (2012-2022). Source: CARE

	2012	2019	2020	2021	2022	ST*	Miniplot: trend since 2012
Belgium	132	87	61	62	63	-28%	
Bulgaria	95	78	55	59	45	-42%	
Czechia	96	81	55	54	49	-40%	
Denmark	31	23	18	23	17	-26%	
Germany	611	363	326	287	300	-17%	
Estonia	17	5	6	5	2	-	
Ireland	35	23	-	-	-	-	
Greece	143	76	75	86	-	-13%	
Spain	175	138	114	173	167	21%	
France	753	549	449	504	549	0%	
Croatia	48	43	46	41	39	-9%	
Italy	423	339	236	302	332	-2%	
Cyprus	10	6	10	10	10	-	
Latvia	16	9	16	-	-	-	
Lithuania	-	28	18	15	18	-36%	
Luxembourg	6	6	2	8	2	-	
Hungary	42	49	39	43	47	-4%	
Netherlands	76	87	69	67	72	-17%	
Austria	84	45	43	41	39	-13%	
Poland	585	383	374	275	212	-45%	
Portugal	65	74	49	51	68	-8%	
Romania	231	152	134	171	141	-7%	
Slovenia	19	8	9	12	3	-	
Slovakia	-	30	31	27	29	-3%	
Finland	41	31	23	27	-	-13%	
Sweden	41	19	30	-	-	-	
EU27	3,866	2,733	2,313	2,414	2,388	-13%	
Norway	20	18	16	12	16	-11%	
Switzerland	39	14	18	23	30	114%	

Notes:

- Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the time series 2012-2022.

3.5 Comparison with other age groups

The trend over the period 2012-2022 shows a decrease of fatalities per million inhabitants in all age groups. In general, the mortality in case of a vehicle crash increases with age. This is demonstrated by Figure 11 below. The **18–24-year-olds** forms an exception to this rule as they **have the highest mortality rate** of all age groups. Mortality for young people aged 15-17 is the second lowest of all age groups.

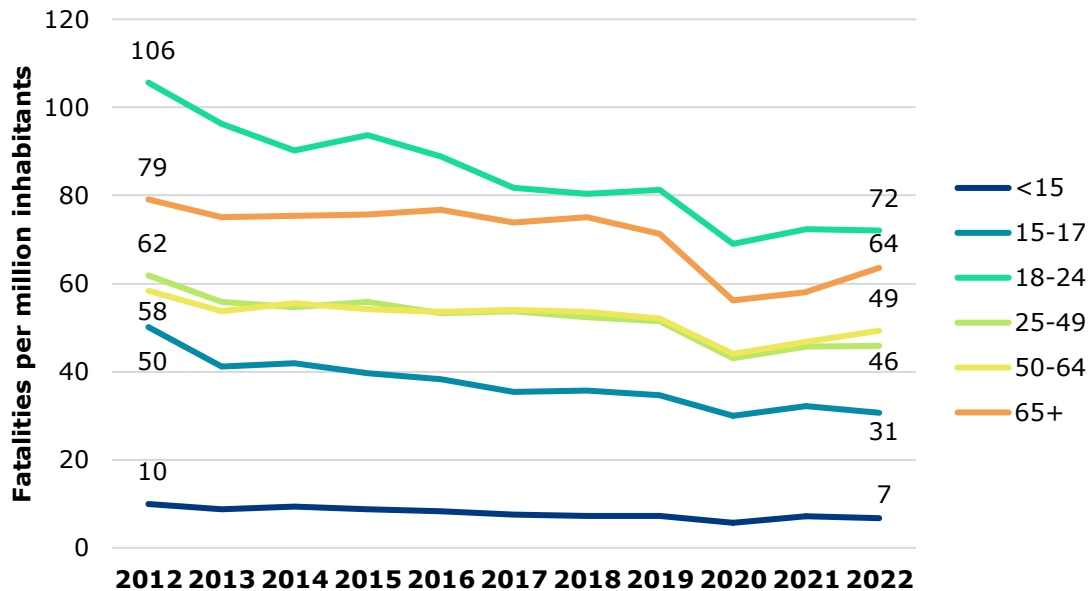
Table 6. Total number and distribution of road fatalities by age group per country in the EU27 and EFTA (2022). Source: CARE

	<15	15 - 17	18 - 24	25 - 49	50 - 64	65 - 74	75 - 84	85+	Total
Belgium	2%	2%	12%	31%	27%	11%	12%	4%	526
Bulgaria	2%	3%	9%	37%	22%	16%	8%	3%	529
Czechia	3%	2%	9%	34%	22%	16%	11%	3%	524
Denmark	4%	3%	11%	23%	24%	11%	14%	9%	154
Germany	2%	2%	11%	24%	24%	12%	15%	9%	2,784
Estonia	8%	4%	4%	41%	20%	16%	4%	2%	49
Ireland	3%	1%	16%	38%	16%	11%	13%	1%	140
Greece	1%	2%	14%	38%	20%	11%	10%	4%	609
Spain	1%	2%	10%	37%	23%	12%	10%	6%	1,735
France	2%	3%	17%	32%	19%	12%	10%	6%	3,260
Croatia	3%	1%	14%	35%	23%	13%	8%	3%	275
Italy	1%	2%	11%	32%	23%	12%	12%	7%	3,107
Cyprus	3%	0%	27%	38%	14%	5%	11%	3%	37
Latvia	5%	2%	12%	35%	24%	10%	9%	3%	131
Lithuania	3%	1%	15%	40%	22%	10%	5%	4%	119
Luxembourg	0%	3%	6%	42%	22%	19%	8%	0%	36
Hungary	2%	1%	9%	35%	25%	15%	9%	4%	532
Netherlands	3%	3%	11%	22%	18%	12%	21%	11%	653
Austria	4%	3%	11%	26%	25%	13%	12%	8%	370
Poland	3%	2%	11%	41%	20%	14%	7%	3%	1,893
Portugal	2%	1%	11%	35%	23%	14%	10%	4%	618
Romania	4%	2%	9%	29%	29%	15%	9%	3%	1,630
Slovenia	1%	1%	4%	32%	26%	16%	15%	5%	85
Slovakia	2%	1%	11%	42%	24%	10%	8%	2%	265
Finland	2%	5%	12%	32%	16%	14%	13%	6%	225
Sweden	3%	4%	15%	25%	19%	13%	11%	10%	204
EU27	2%	2%	12%	32%	23%	13%	11%	6%	20,499
Norway	2%	1%	14%	22%	28%	15%	12%	6%	116
Switzerland	3%	2%	12%	26%	19%	12%	17%	9%	241

Notes:

- Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities among young people in the year 2022.

Figure 11. Annual number of fatalities per million inhabitants (=mortality) by age group in the EU27 (2012-2022). Source: CARE & EUROSTAT

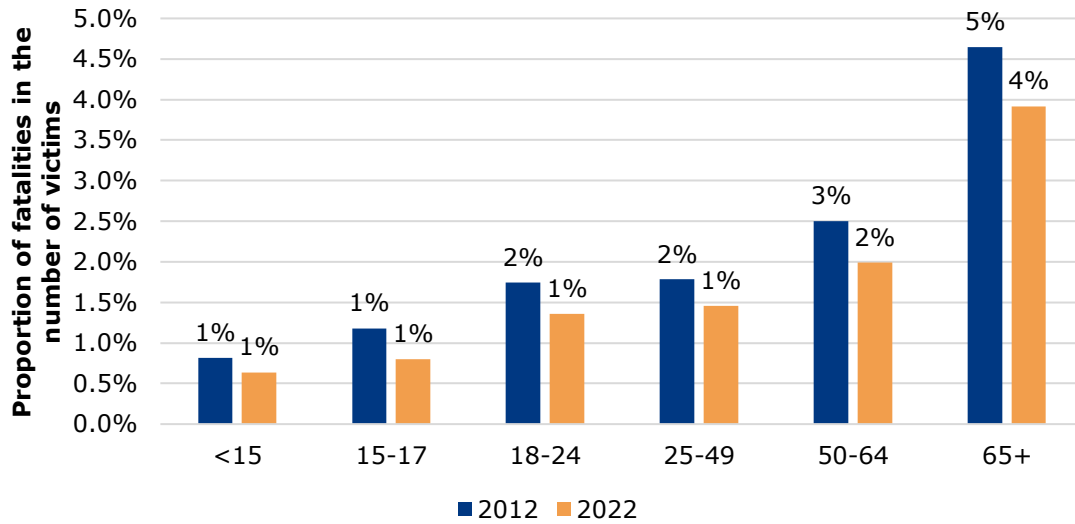


The figure below illustrates the percentage of fatalities among all registered traffic victims (including those who were fatally, seriously, or slightly injured) for different age groups. In 2022, **1 out of every 100 registered victims between the ages of 15 and 24 died in the crash.**

The proportion of fatalities in the total number of victims increases with age. Seniors tend to experience more severe injuries compared to other age groups when subjected to the same collision impact, which results in 4 fatalities out of 100 registered traffic victims.

Please note that traffic victims are underreported in crash statistics and that the ratio "number of fatalities" to "number of victims" would be lower for all age groups if there were no underreporting.

Figure 12. Proportion of fatalities in the total number of reported victims by age group in the EU27 (2012 & 2022). Source: CARE

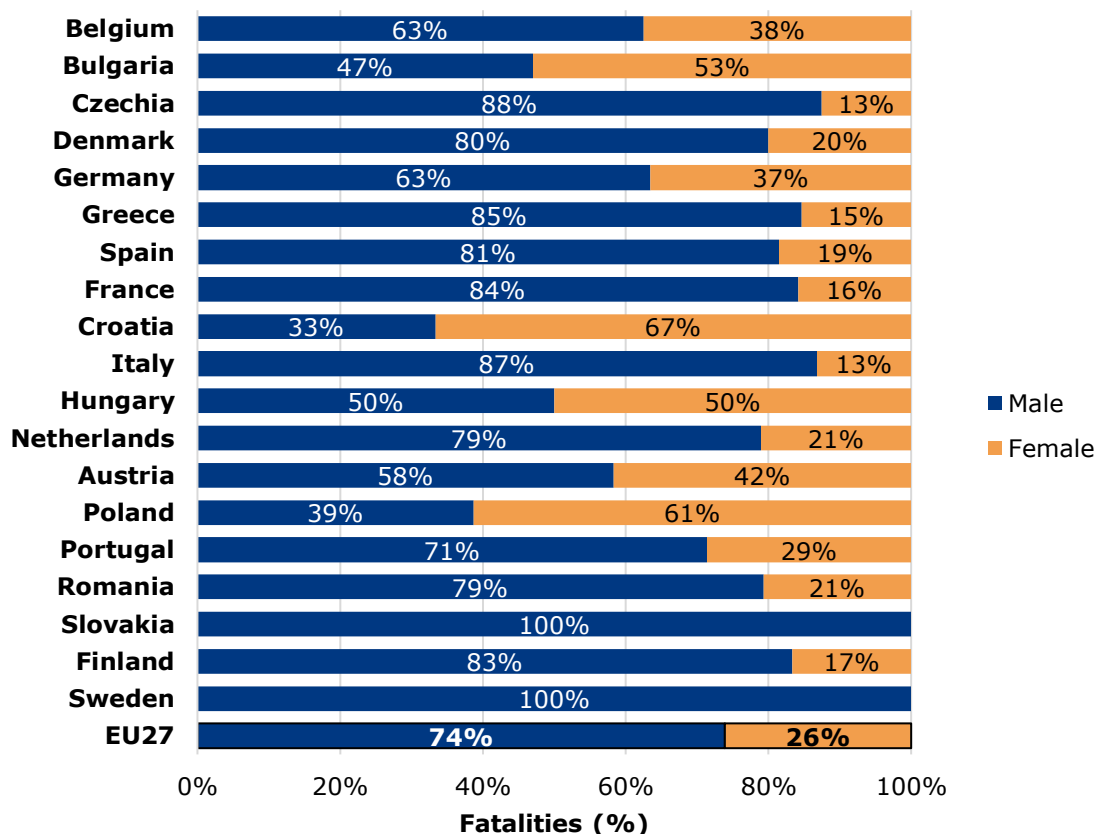


4. Road user

4.1 Gender

For young **people aged 15-17**, the percentage of **male fatalities is above 85% in many EU Member States, such as Czechia, Italy and Slovakia**, which is considerably higher than the **EU27 average of 74%**. On the other hand, Croatia (33%) Poland (39%), Bulgaria (47%) and Hungary (50%) have notably lower proportions of male fatalities in this age group (50% or less).

Figure 13. Distribution of fatalities among young people aged 15-17 by gender per country in the EU27 and EFTA (2022). Source: CARE

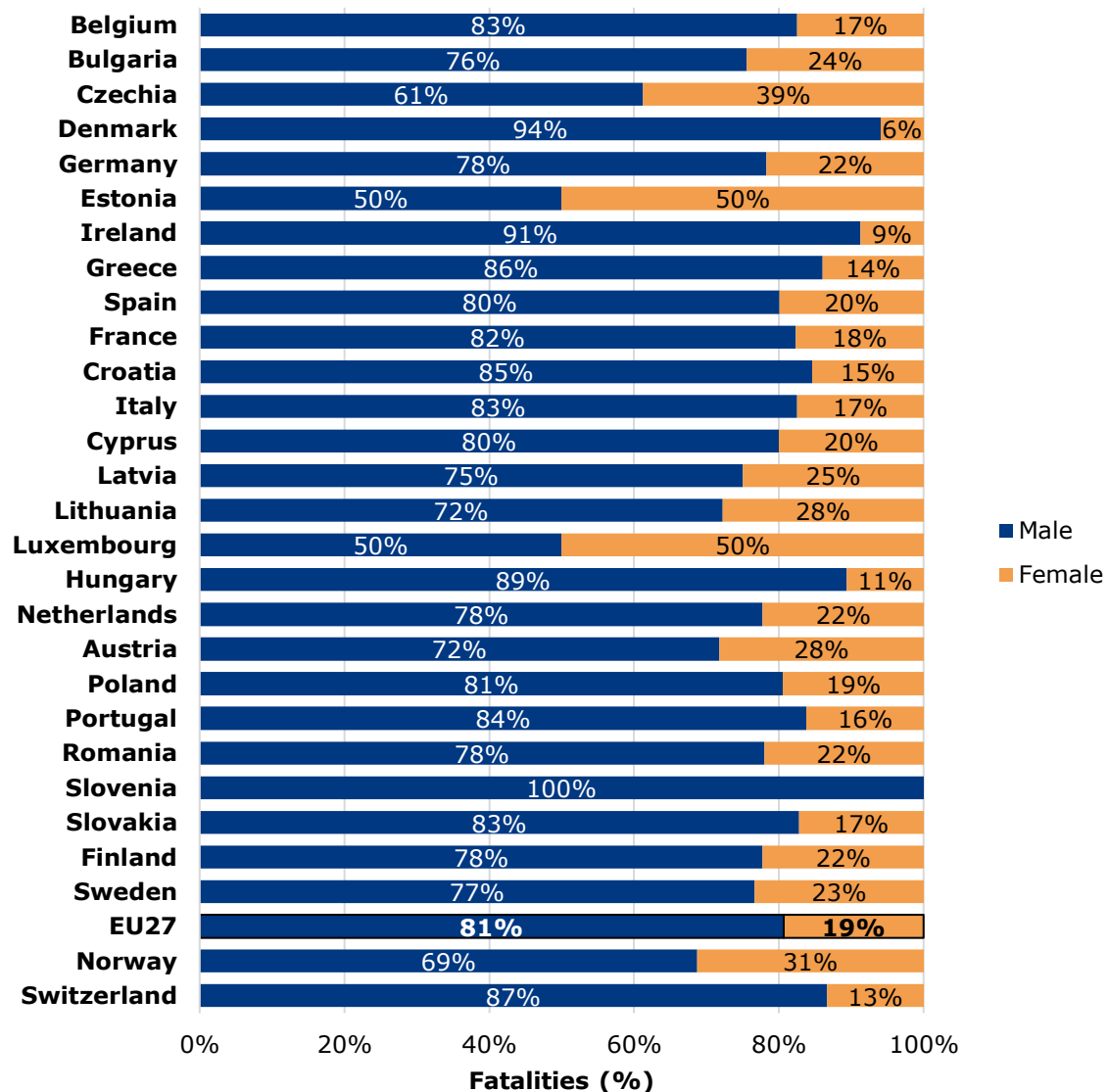


Notes:

- Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Slovenia, Iceland, Liechtenstein, Norway and Switzerland are not included in the figure because there are fewer than 10 fatalities on the year 2022.
- For Greece, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.

For young people aged 18-24 the **EU27 average** of the percentage of **male fatalities is 81%**. Denmark (94%) and **Ireland (91%)**, **Hungary (89%)** and **Switzerland (87%)** are well above the **average**, whereas Norway (69%) as well as Czechia (61%) and Luxembourg and Estonia (both 50%) have lower proportions of male fatalities.

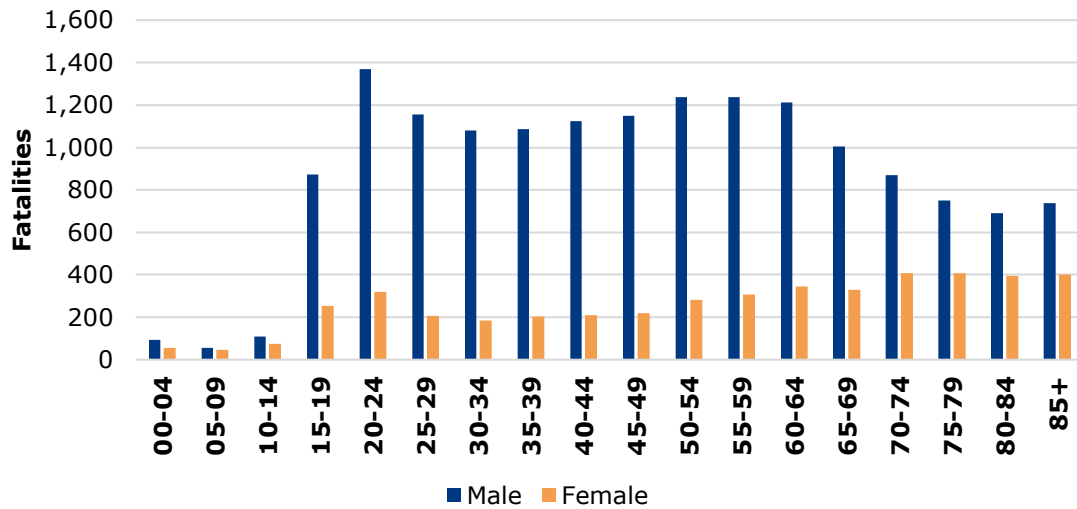
Figure 14. Distribution of fatalities among young people aged 18-24 by gender per country in the EU27 and EFTA (2022). Source: CARE



Notes:

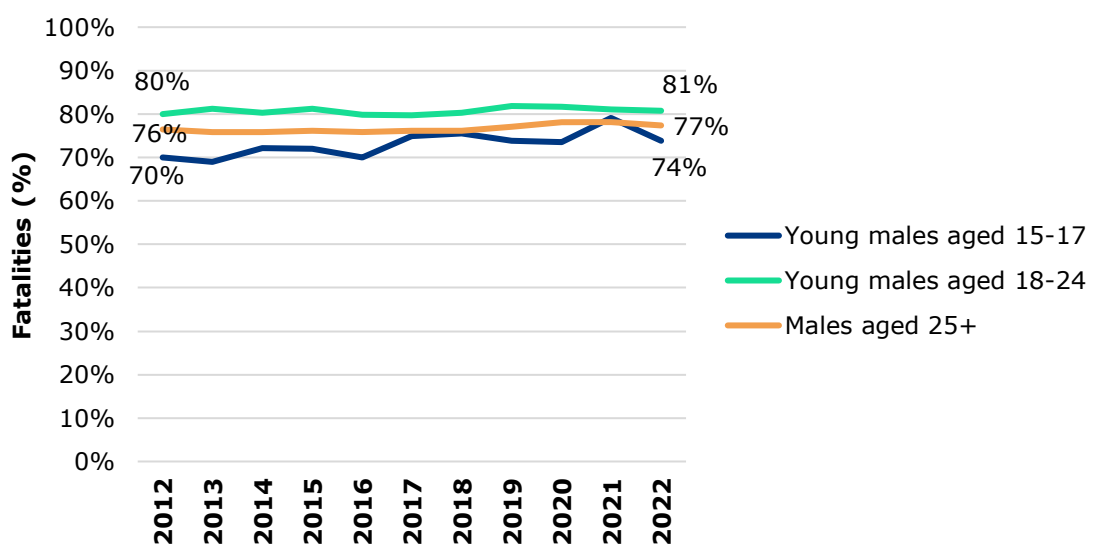
- Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- For Ireland, Greece, Latvia, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.

Figure 15. Distribution of fatalities over 5-year age categories and by gender in the EU27 (2022). Source: CARE



77% of all road fatalities in the age group 25+ are male. **The proportion of male fatalities for young people aged 15-17 (74%)** is slightly lower and the proportion for young people aged **18-24 (81%)** is slightly higher, but the proportion of male fatalities for young people aged 15-17 has marginally increased since 2012.

Figure 16. Annual share of male fatalities by age group in the EU27 (2012-2022). Source: CARE



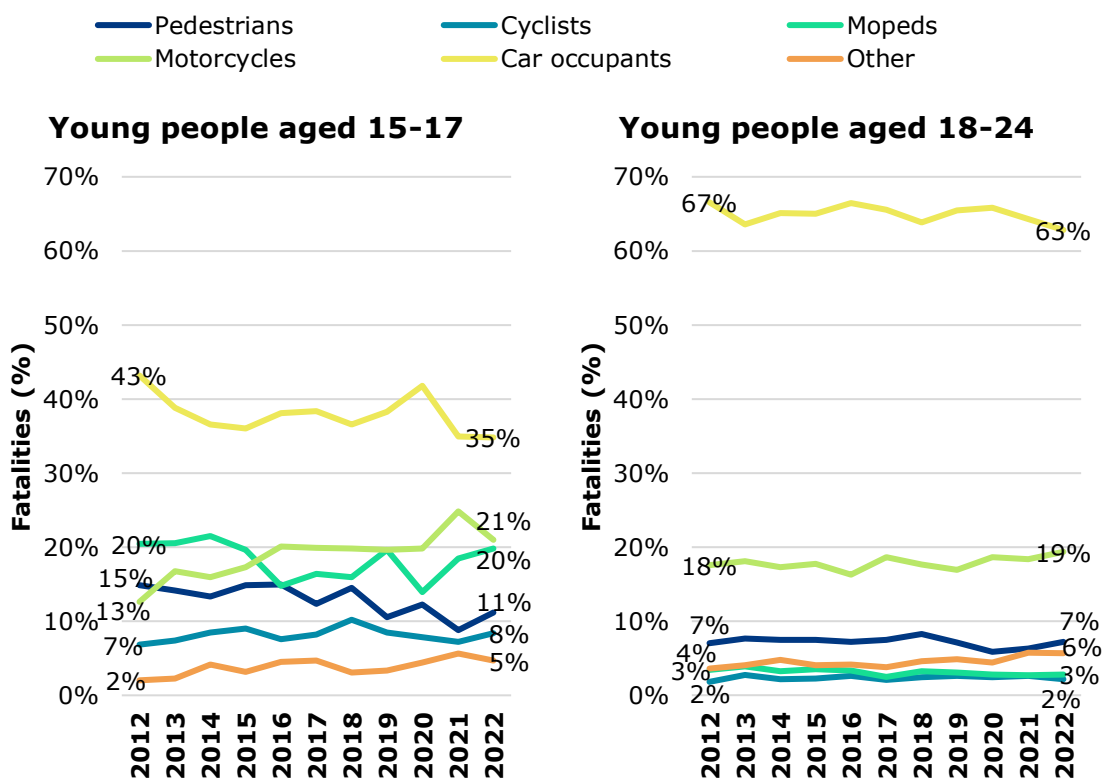
4.2 Transport modes involved

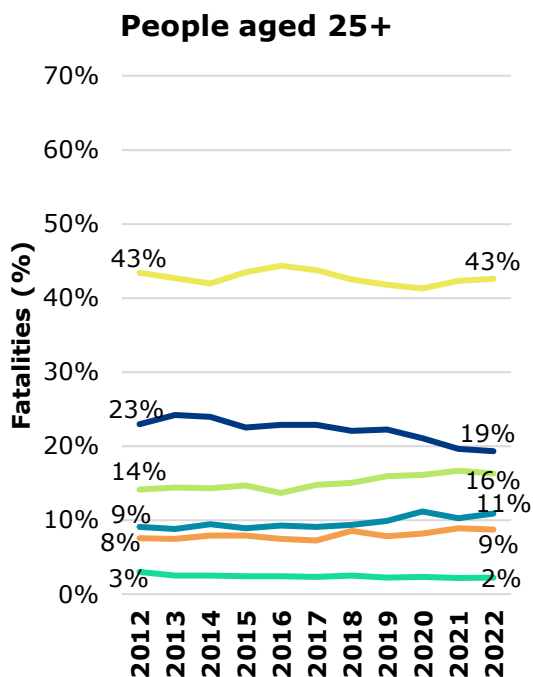
The distribution of transport modes differs between the two age groups. Among young people aged **15-17**, **car occupants** account for more than one third (35%) of fatalities, while **motorcyclists and moped riders** make up 25% and 18%, respectively.

The situation is similar for the age group **18-24**. **Car occupants** account for **64% of fatalities**, followed by **motorcyclists** with **18%**. However, compared to the younger and 25+ age groups, the former value is remarkably higher.

These differences reflect the mobility patterns of young people, as well as their lack of advanced driving skills and predisposition for risk-taking due to their young age (see Thematic report on Novice Drivers, EC, 2024). While the distribution of fatalities by transport mode remained relatively stable overall in the period 2012-2022, there has been an **increase in the proportion of fatalities involving motorcycles, and a decrease in the proportion involving pedestrians and car occupants among young people aged 15-17**.

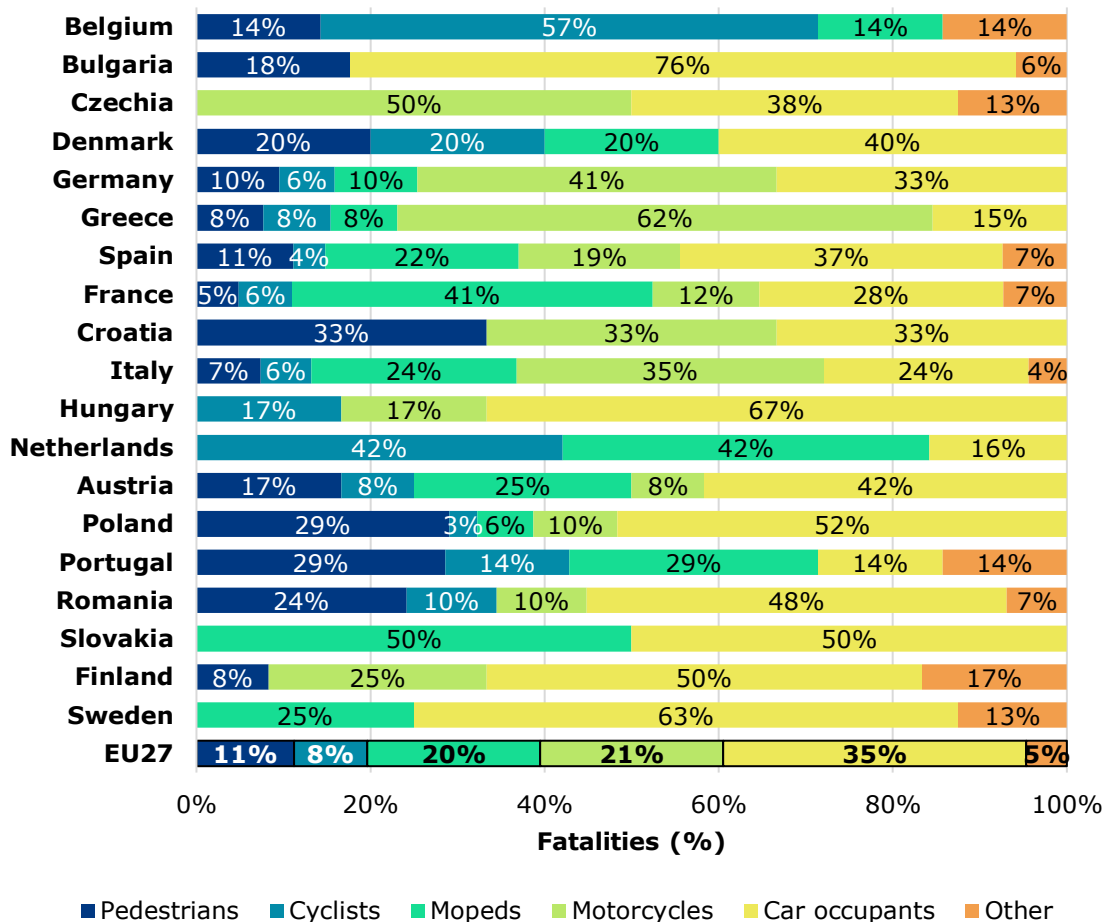
Figure 17. Distribution of young people fatalities (aged 15-17 and 18-24) and fatalities aged 25+ by transport mode in the EU27 (2012-2022). Source: CARE





The **distribution of fatalities among young people aged 15-17 varies across different countries and modes of transport.** Bulgaria, Hungary, Sweden, Poland and Finland have a notably high percentage of car occupants among fatalities in this age group. The Netherlands and Belgium, on the other hand, have a remarkable proportion of cyclist fatalities. In the **Netherlands, Slovakia and France more than 40% of the fatalities in this age group involves mopeds.** Moreover, in Croatia, Poland and Portugal up to one third of all fatalities among young people aged 15-17 are pedestrians.

Figure 18. Distribution of fatalities among young people aged 15-17 by transport mode per country in the EU27 and EFTA (2022). Source: CARE



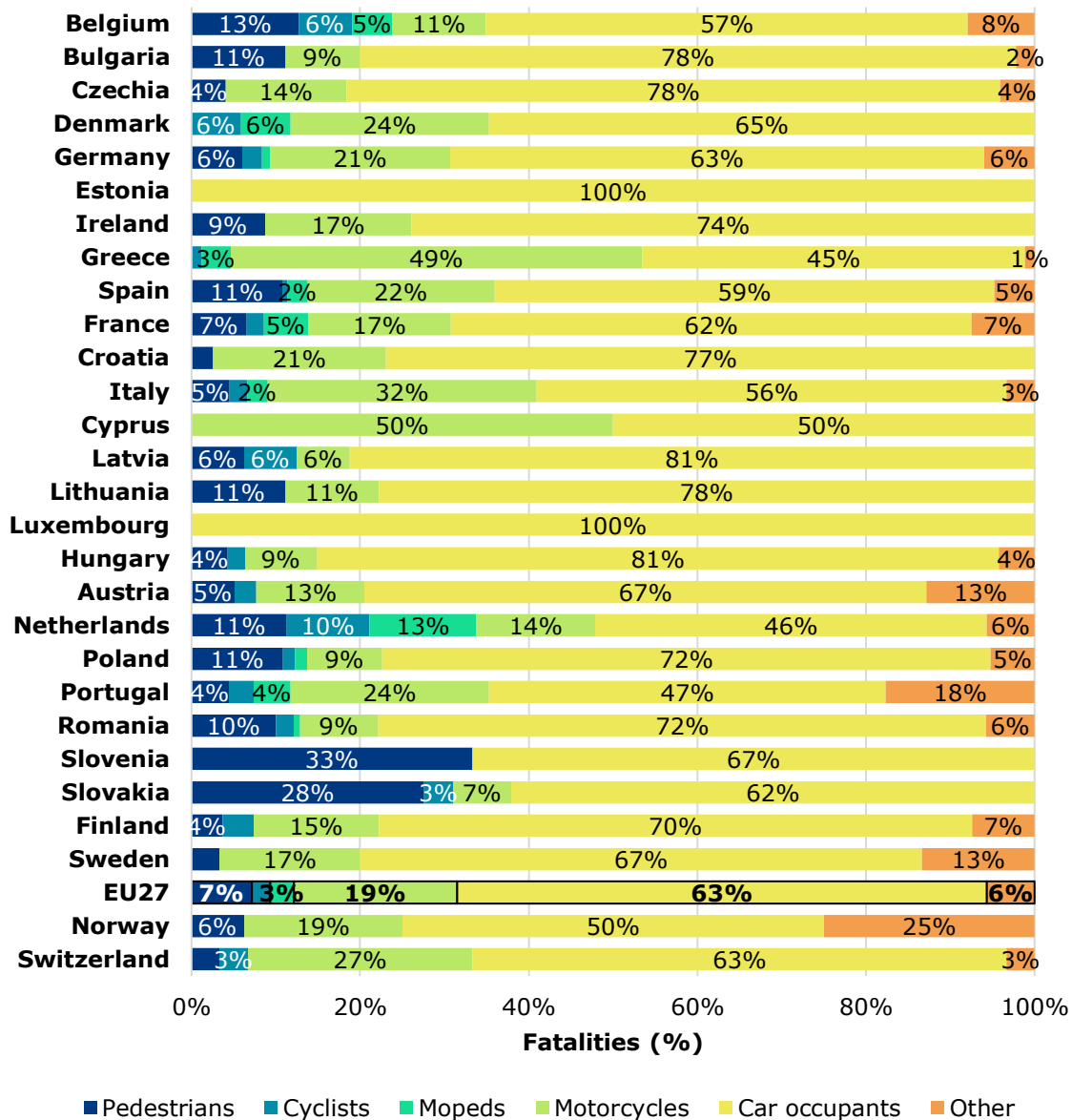
Notes:

- Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Slovenia, Iceland, Liechtenstein, Norway and Switzerland are not included in the figure because there are fewer than 10 fatalities on the year 2022.
- For Greece, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.

The **distribution of fatalities among young people aged 18-24 also varies across different countries**. In Bulgaria, Czechia, Estonia, Ireland, Croatia, Latvia, Lithuania, Hungary, Poland, Romania and Finland, more than 70% of the fatalities are car occupants. On the contrary, in Greece only 45% of the fatalities involve car occupants. However, the proportion of motorcycle fatalities is the highest (49%) compared to the other countries.

These national differences in both age groups can likely be attributed, at least in part, to the specific mobility behaviour (of young people) in each country.

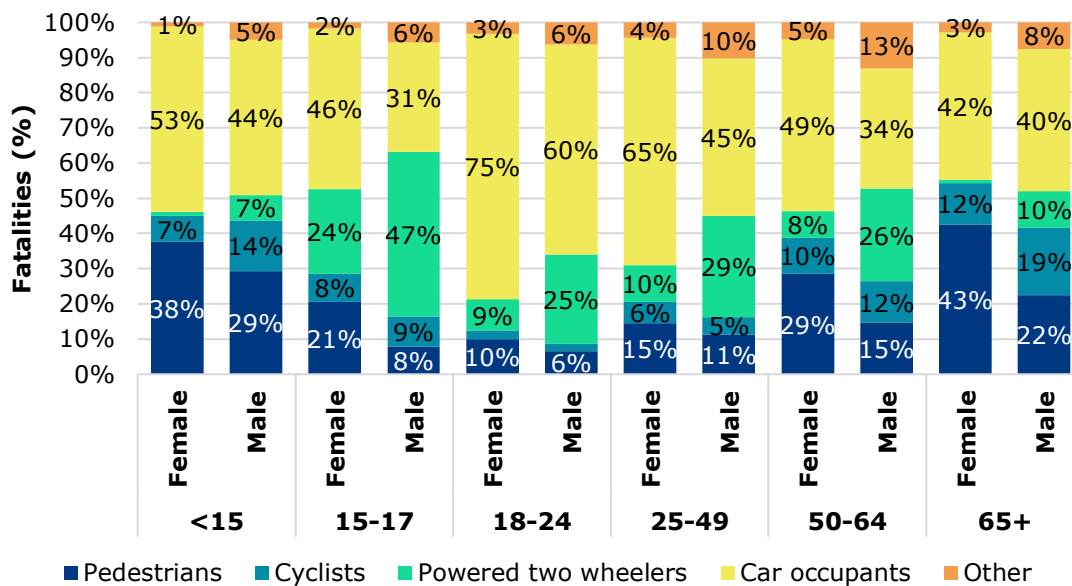
Figure 19. Distribution of fatalities among young people aged 18-24 by transport mode per country in the EU27 and EFTA (2022). Source: CARE



Notes:

- Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- For Ireland, Greece, Latvia, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.

Figure 20. Distribution of fatalities by age, gender and transport mode in the EU27 and EFTA (2022). Source: CARE

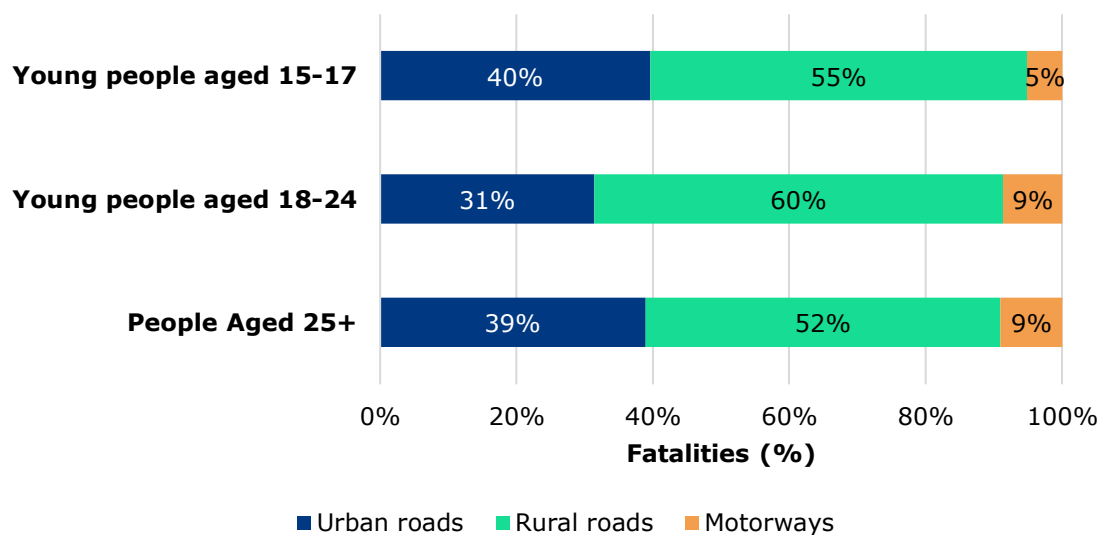


5. Location

5.1 Road type

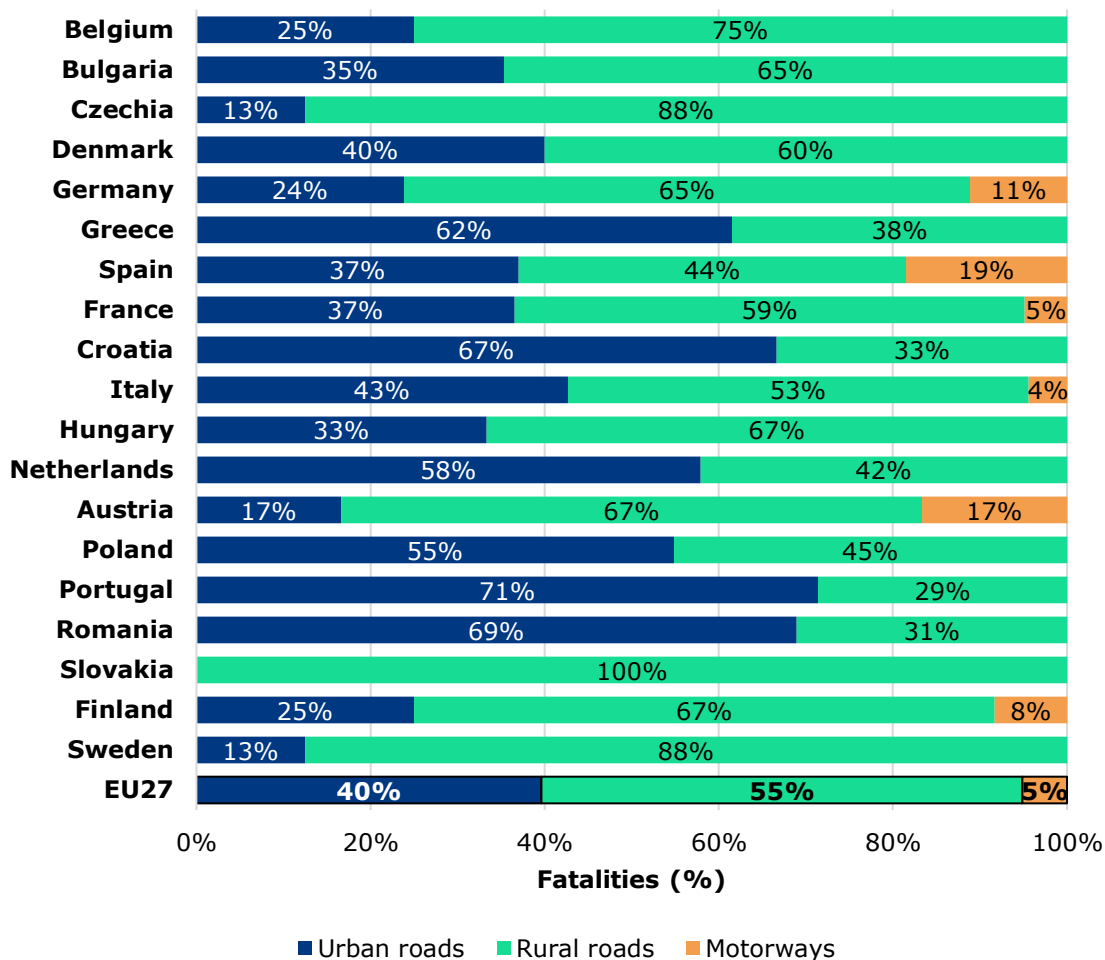
Fatalities among young people aged 15-17 are characterised by a slightly lower proportion (5%) on motorways compared to the age group 25+ (9%). Furthermore, **fatalities among young people predominantly occur on rural roads**, accounting for 55% (15-17) and 60% (18-24), respectively, which is notably higher than the proportion for people aged 25+ (52%).

Figure 21. Distribution of fatalities by age group and road type in the EU27 (2022). Source: CARE



There are **notable differences among EU countries in terms of the distribution of fatalities across different types of roads**. Countries such as Germany, Spain and Austria have a high percentage (11% or more) of young people aged 15-17 killed on motorways. Slovakia, Czechia and Sweden have the highest proportion of young people aged 15-17 killed on rural roads (88% or more). In Greece, Croatia, Portugal and Romania, the proportion of young people aged 15-17 killed on urban roads is 62% or more, which is remarkably higher than the EU average (40%).

Figure 22. Distribution of fatalities among young people aged 15-17 by road type per country in the EU27 and EFTA (2022). Source: CARE

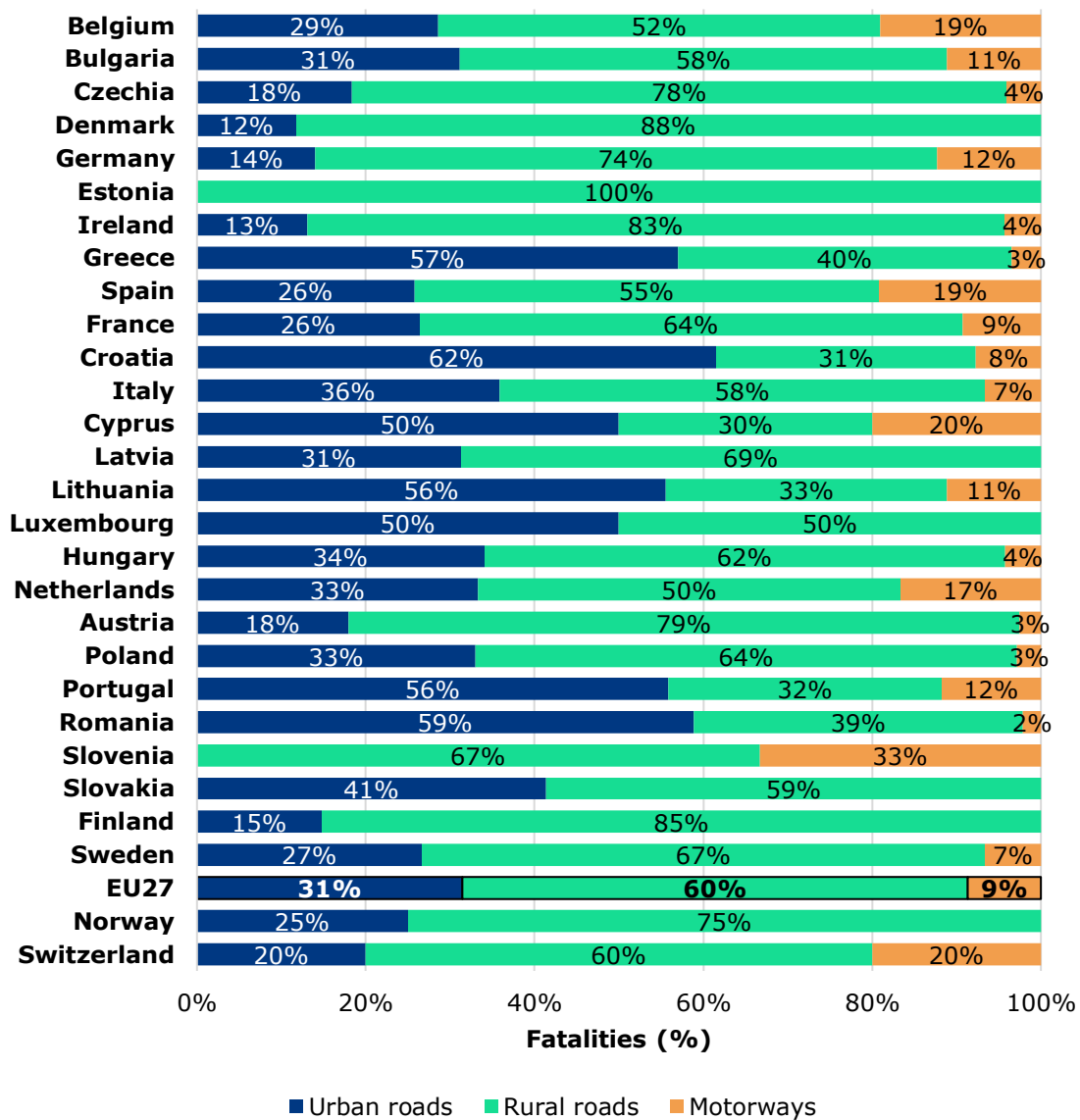


Notes:

- Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Slovenia, Iceland, Liechtenstein, Norway and Switzerland are not included in the figure because there are fewer than 10 fatalities on the year 2022.
- For Greece, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.

More than half of fatalities among young people aged 18-24 occur on urban roads in Greece, Croatia, Cyprus, Lithuania, Luxembourg, Portugal, and Romania. Denmark, Estonia, Ireland and Finland have the highest proportion of fatalities in this age group occurring on rural roads (above 80%). In Belgium, Spain, Cyprus, Slovenia, Switzerland and the Netherlands, the percentage of young people aged 18-24 killed on motorways is 17% or higher. All mentioned shares differ notably from the EU average.

Figure 23. Distribution of fatalities among young people aged 18-24 by road type per country in the EU27 and EFTA (2022). Source: CARE



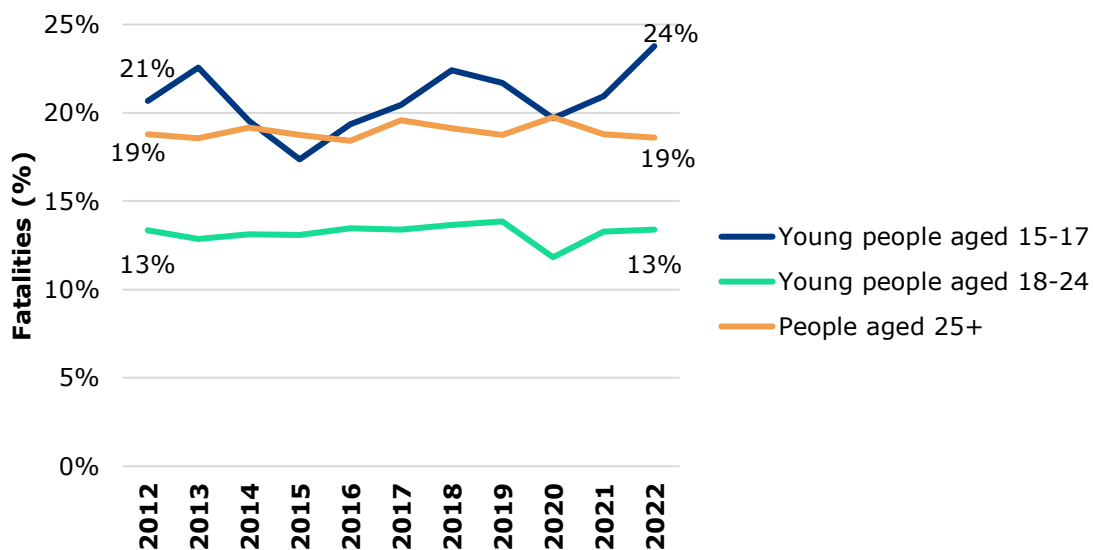
Notes:

- Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- For Ireland, Greece, Latvia, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.

5.2 Junction

Compared to the age group 18-24 (13%) fatalities at a junction are more likely to happen among young people aged 15-17 and is increasing since 2019 amounting to 24% in 2022. On the other hand, young people aged 18-24 have less fatalities at junctions than the reference group 25+ (19%).

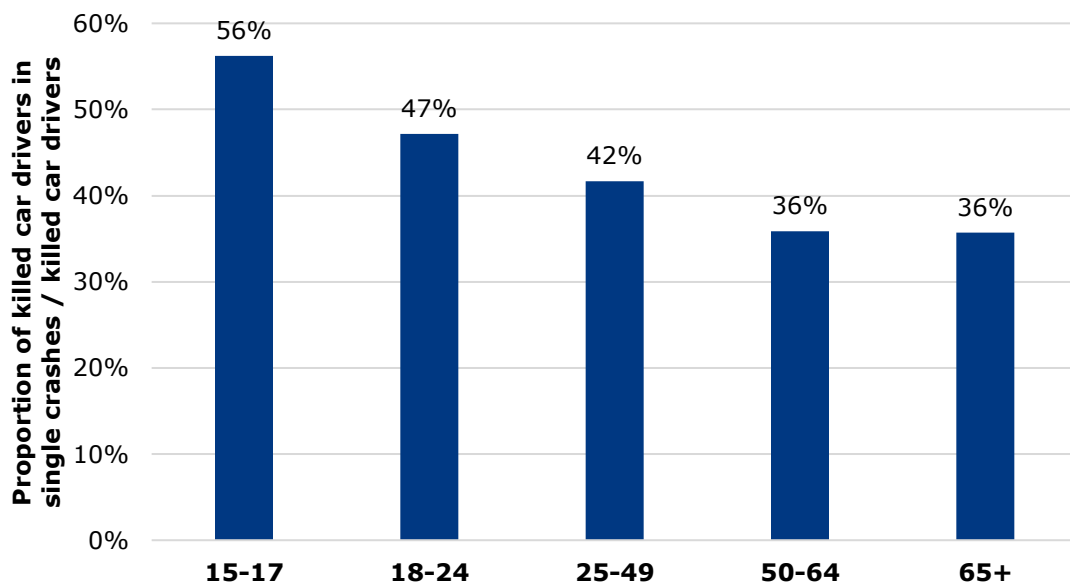
Figure 24. Proportion of fatalities among young people (aged 15-17 and 18-24) and fatalities of people aged 25+ at junctions in the EU27 (2012-2022). Source: CARE



6. Type of collision

The younger the car drivers, the more likely they are to be killed in a single-vehicle crash. 56% of all fatal crashes involving 15–17-year-olds car drivers are recorded as single-vehicle crashes, while in the 65+ age group, it is only 36%.

Figure 25. Proportion of car drivers killed in single car crashes in the total number of car drivers killed, by age categories, in the EU27 (2022). Source: CARE

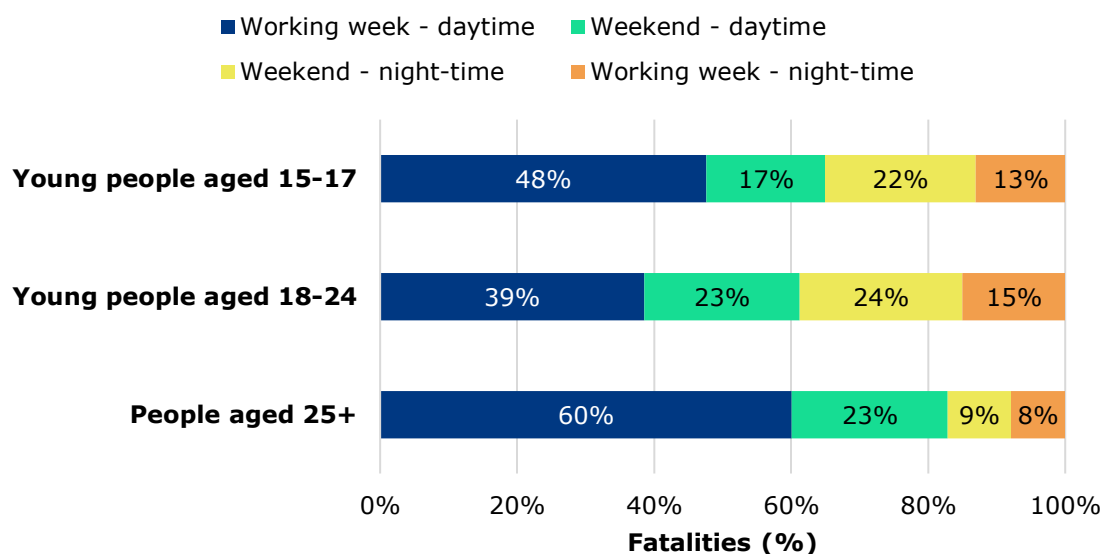


7. Time

7.1 Period of the week

Compared to the age group 25+, **young people are considerably more likely to be killed during the weekend at night-time**. The proportion of road fatalities among young people during the working week - daytime (from 6.00 a.m. to 9.59 p.m. on weekdays) is remarkably lower. Compared to people aged 25+ (60%) **young people aged 18-24 are involved in fatal crashes during the daytime at a rate of 39%, people aged 15-17 at a rate of 48%**.

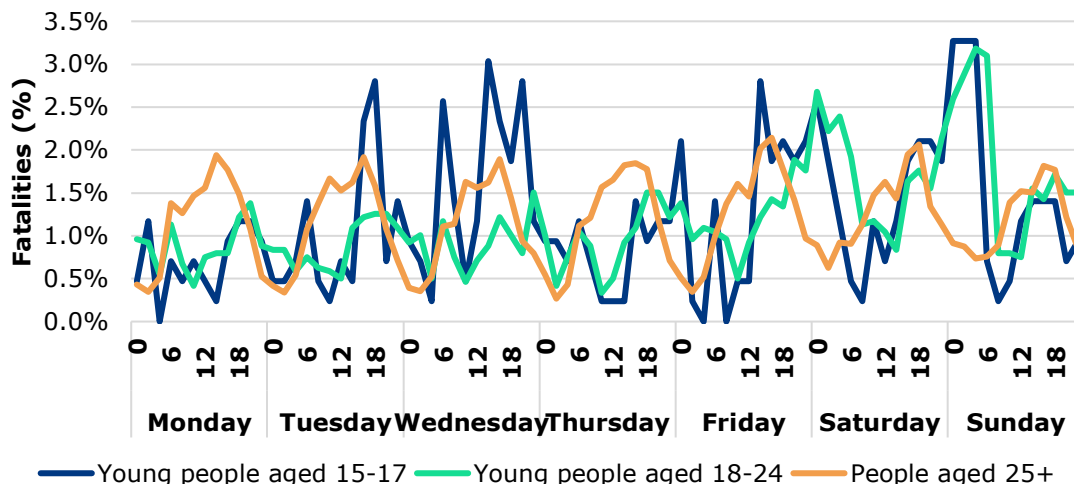
Figure 26. Distribution of fatalities among young people (aged 15-17 and 18-24) and fatalities of people aged 25+ according to period of the week in the EU27 (2022). Source: CARE



7.2 Day of the week, time of the day and hour

The figure below illustrates, that fatalities among both, **young people aged 15-17 and 18-24 reach their highest point during weekend nights**. The peak is highest on Saturday night into Sunday, followed by Friday night into Saturday. The fatalities among 15-17-year-olds additionally shows a peak during the week on Tuesday and Wednesday in the afternoon.

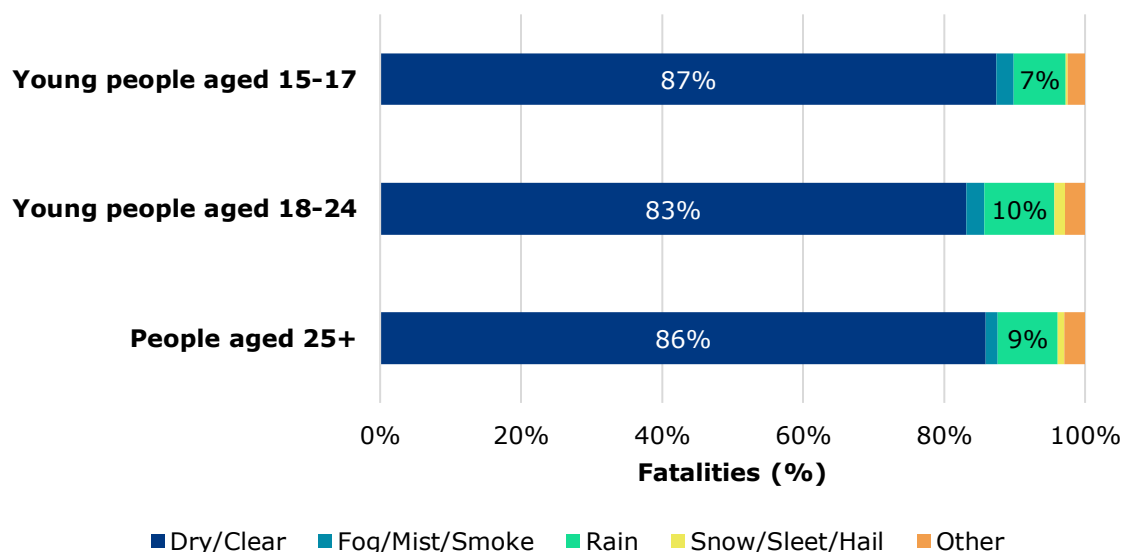
Figure 27. Distribution of fatalities among young people (aged 15-17 and aged 18-24) and people age 25+ by day of the week and hour in the EU27 (2022). Source: CARE



7.3 Weather

In terms of weather conditions, there is little difference across age groups. Approximately **8 out of 10 fatal crashes among young people aged 15-24 occur during dry and clear weather conditions**. Fatalities in less common weather conditions such as fog, snow, or hail are extremely rare.

Figure 28. Distribution of fatalities among young people (aged 15-17 and 18-24) and fatalities of people aged 25+ according to weather conditions during the crash in the EU27 (2022). Source: CARE



8. Notes

8.1 Definitions

The definitions below are taken from the CADAS Glossary and the UNECE Glossary.

CADAS Glossary: https://road-safety.transport.ec.europa.eu/system/files/2023-09/CADaS%20Glossary_v%203_8_1.pdf

UNECE/ITF/Eurostat Glossary:
<https://www.unece.org/index.php?id=52120>

Accident / crash

An 'injury' road crash concerns an incident on a public road involving at least one moving vehicle and at least one casualty (person injured or killed). Note: the definition of 'injury' varies considerably among EU countries and is open to interpretation by the police thus affecting the reliability of cross-country comparisons.

Fatalities

Total number of persons fatally injured; correction factors applied when needed. Death within 30 days of the road crash, confirmed suicide and natural death are not included.

Motorway

Public road with dual carriageways, and at least two lanes each way. Entrance and exit signposted. Road with grade separated interchanges. Road with a central barrier or central reservation. No crossing permitted. No stopping permitted unless in an emergency. Entry prohibited for pedestrians, animals, bicycles, mopeds, agricultural vehicles.

Rural roads (roads outside urban areas)

Public roads outside urban boundary signs, excluding motorways.

Victims

Total of fatalities, seriously injured and slightly injured and injured.

Urban roads (roads inside urban areas)

Public roads inside urban boundary signs.

Weekend – daytime

Saturday to Sunday 6.00 a.m. to 9.59 p.m.

Weekend – night

Friday 10 p.m. to Saturday 5.59 a.m.

Saturday 10 p.m. to Sunday 5.59 a.m.

Sunday 10 p.m. to Monday 5.59 a.m.

Working week – daytime

Monday to Friday 6.00 a.m. to 9.59 p.m.

Working week – night

Monday 10 p.m. to Tuesday 5.59 a.m.

Tuesday 10 p.m. to Wednesday 5.59 a.m.

Wednesday 10 p.m. to Thursday 5.59 a.m.

Thursday 10 p.m. to Friday 5.59 a.m.

Young people

Persons aged 15 to 24 years.

8.2 Data source

The main data source for this report is CARE (Community database on Accidents on the Roads in Europe). The database contains data obtained from national data sources, not only EU members but also the four EFTA countries Switzerland, Norway, Iceland, and Liechtenstein. The data in the report were extracted in August 2023.

8.3 Small cells

Absolute numbers of fatalities can be very small for small countries, which can strongly influence trend indicators and other derived indicators such as mortality. Care should be taken when interpreting these numbers. When commenting on the Figures, countries with small numbers were omitted.

8.4 Missing data

Some countries did not provide data for all years and/or all variables to the CARE database. When data are missing for specific combinations of years and countries, imputation is used to fill in the empty cells. Imputation results for individual countries are never published in the Facts and Figures reports, but they are aggregated to generate an imputed number at EU27 level. The following imputation method for individual countries is used:

- Values missing at the end of a time series are given the last known value in the series.
- Values missing at the beginning of a time series are given the first known value in the series.
- If values are missing in the middle of a time series, linear extrapolation is used.

Figures that only contain information on the relative distribution of fatalities have not been obtained through imputation. The report always mentions in footnotes when imputation was used. If this is not mentioned in the footnotes, no imputation was used.

8.5 Data cleaning

Area / Road type

- Malta 2020 area: 'rural' recoded to 'unknown'

Transport mode: HGVs

- Poland < 2018 and Germany < 2014: HGV recoded to artificial code 'Lorries + HGVs' because obviously not separated in the data.

Junctions

- Several data issues due to different coding, inconsistent use of categories and different breaks in time series
- General grouping:
 - 'not at junction'
 - 'unknown'
 - all other codes combined to 'junction'

Data cleaning and recoding was done in the following countries: Bulgaria, Estonia, Finland, Germany, Greece, Ireland, Lithuania, Malta, Slovenia, Switzerland

