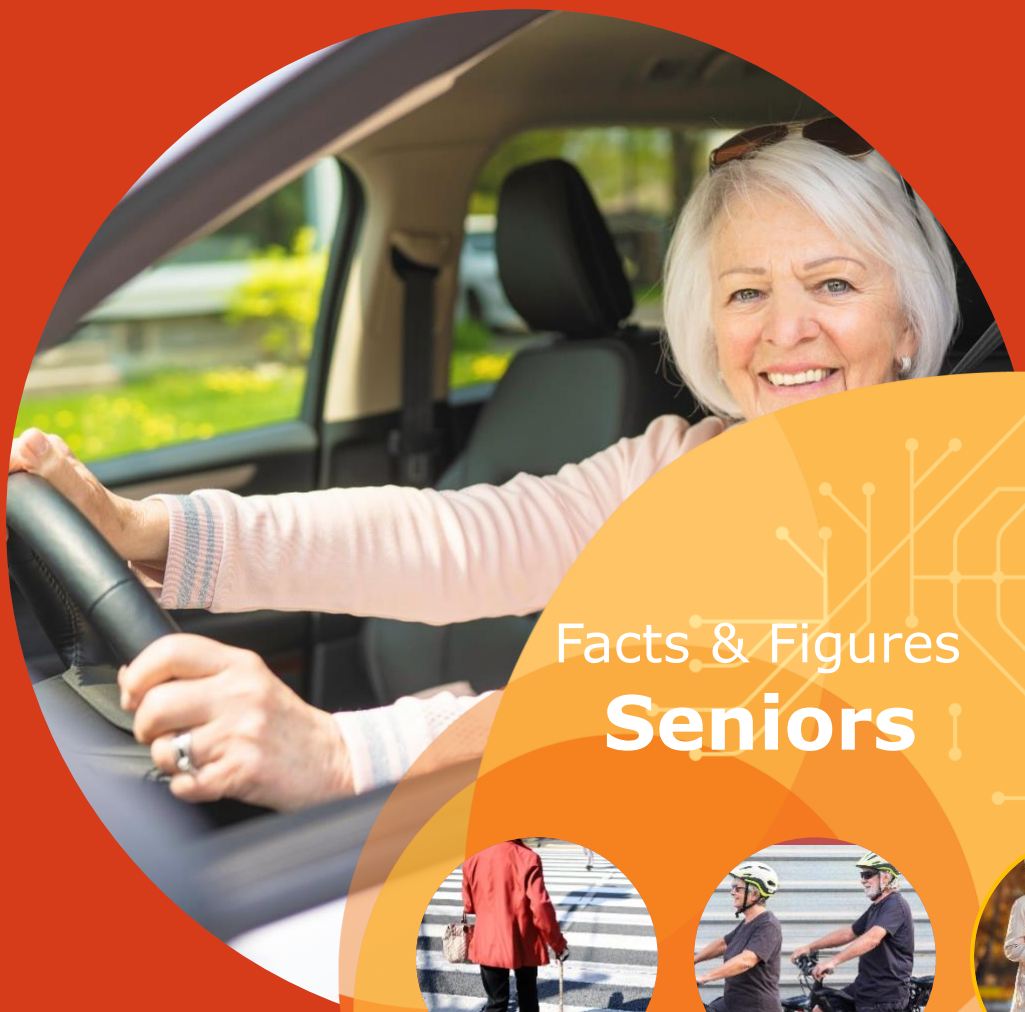
European Commission



Facts & Figures

Seniors

Mobility and Transport

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).

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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

Contents

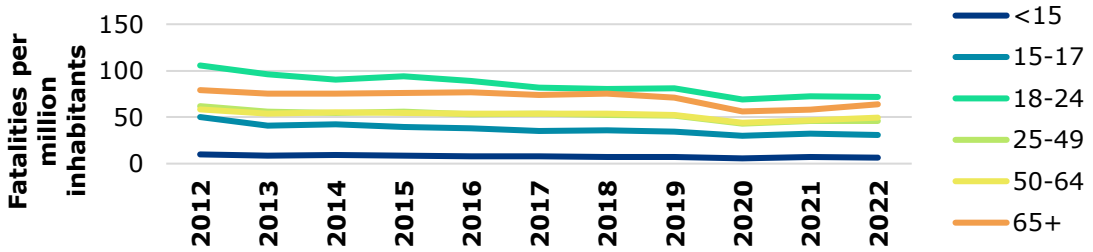
1. Key facts

This Facts and Figures report looks at senior fatalities on European roads. Seniors are persons aged 65 years or older. All observations reported were derived from the available data, the statistical significance of differences or relations between values has not been tested.

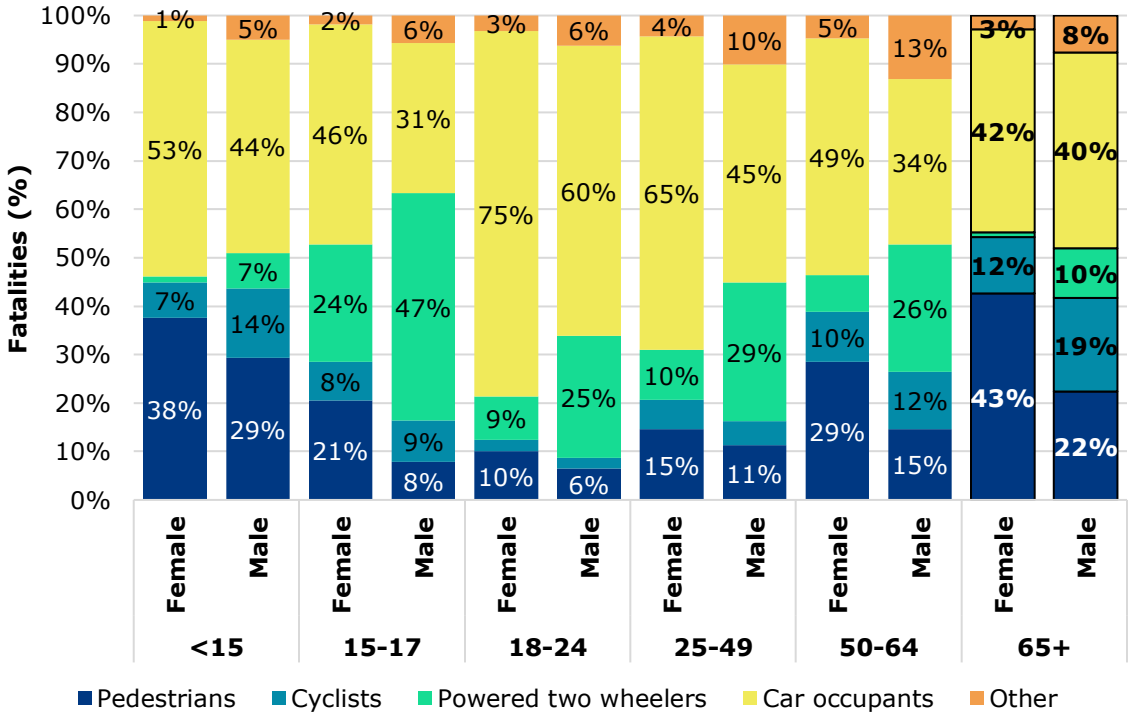
Senior Fatalities 2022

- 5,992 fatalities
- 29% of all road fatalities

Mortality



Transport mode



2. Summary

Seniors, individuals aged 65 years and older, distinguish from other age groups due to their increased physical vulnerability. When exposed to the same collision impact, they face a higher risk of fatality compared to other age groups. Furthermore, **seniors have the second highest mortality rate among all age groups, with an average of about 64 senior fatalities per million senior inhabitants in road traffic within the EU27**.

The number of fatalities among seniors remained relatively stable, ranging around 6,000 fatalities between 2012 and 2022. The proportion of senior fatalities in the total number of fatalities showed a slight increase from 28% to 29% comparing 2019 and 2022.

In 2022 in all EU27 and EFTA countries the share of men among fatalities in road traffic was very high. Among seniors, this gender difference was less pronounced than in the age group up to 65 years in all countries.
When considering the mode of transportation, seniors experienced a considerably high number of fatalities in the most vulnerable modes. Specifically, 29% of senior fatalities in 2022 were pedestrians, while 17% were cyclists. It is important to note that these figures represented EU averages, with even higher percentages observed in a majority of EU countries. In certain European Member States, such as Romania, Latvia and Lithuania, around half of all senior fatalities in 2022 were pedestrians. On the other hand, the Netherlands, Belgium and Germany had a remarkable proportion of cyclists.

Senior road fatalities in 2022 also differed in other respects when compared to people aged up to 65:

- **Senior fatalities occurred more often in daytime during the working week (72% versus 51%).**
- There were proportionately **more fatalities on urban roads (51% versus 33%)** and consequently fewer on rural roads and motorways.
- **Fatalities at a junction** were more likely to happen among seniors (24% versus 16%)
- **One third of senior car drivers died in a single crash**. Car drivers aged up to 55 have a higher share of fatal single crashes ranging from 37% to 48%, especially younger adults (up to 30 years), with nearly 50%.

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.

Comparison Group

Please note that both age groups are compared with persons aged up to 65 years.

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. Senior fatalities (65+) per country in the EU27 and EFTA (2012-2021). Source: CARE

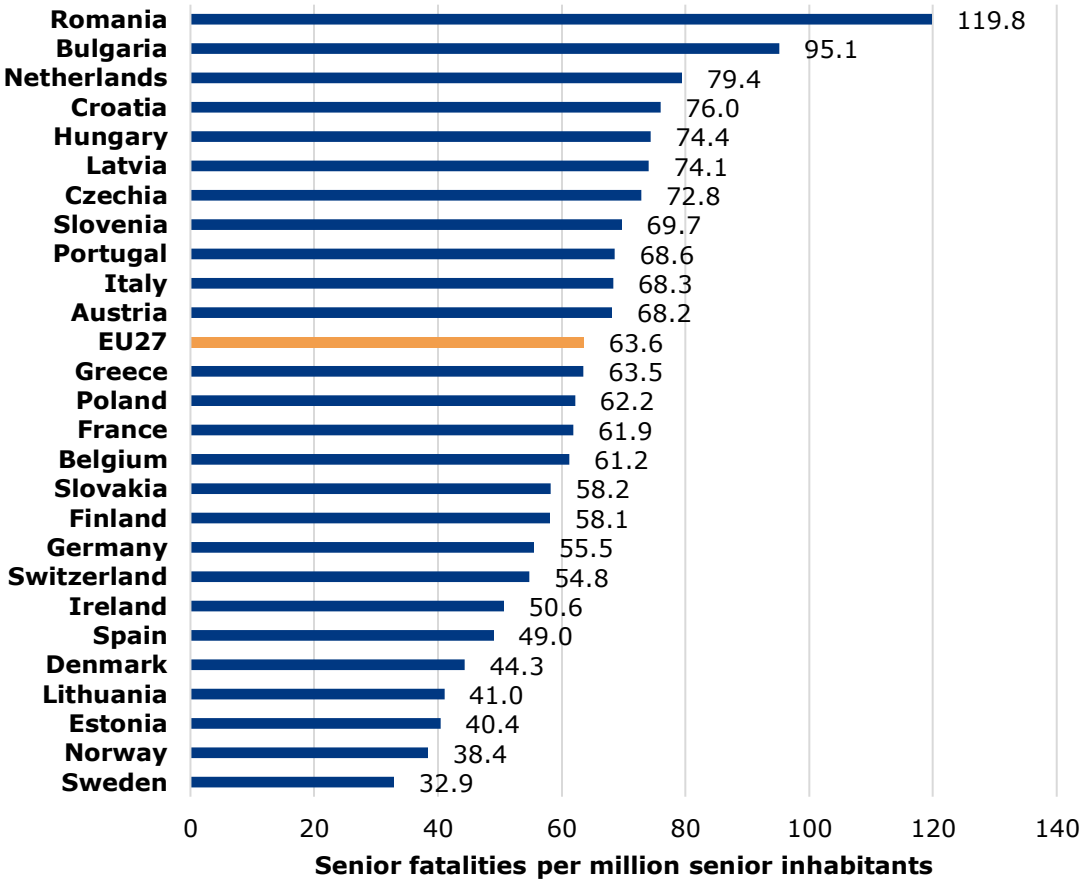
Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	LT*	ST*
Belgium	193	171	189	194	162	151	169	167	118	145	139	-28%	-17%
Bulgaria	116	107	142	147	140	178	151	162	109	142	141	22%	-13%
Czechia	157	155	131	178	160	150	167	154	134	149	158	1%	3%
Denmark	44	53	58	49	72	51	50	63	57	41	53	21%	-16%
Germany	994	999	987	1,024	1,049	994	1,045	1,037	894	868	1,023	3%	-1%
Estonia	18	19	16	13	17	12	14	14	13	15	11	-39%	-21%
Ireland	36	46	43	32	45	34	28	35	-	-	-	-	-
Greece	248	234	187	225	236	192	224	181	141	153	-	-38%	-16%
Spain	506	479	479	505	515	467	498	492	362	349	467	-8%	-5%
France	745	688	770	829	883	869	842	845	642	761	880	18%	4%
Croatia	79	75	81	63	83	79	78	58	56	57	66	-17%	14%
Italy	1,068	1,011	1,056	1,088	1,045	1,109	1,061	994	756	870	960	-10%	-3%
Cyprus	9	8	11	16	14	17	10	20	16	8	7	-	-65%
Latvia	34	40	42	33	35	29	30	21	29	-	-	-	-
Lithuania	-	52	49	66	43	49	40	45	45	29	23	-	-49%
Luxembourg	9	9	2	8	12	4	4	2	5	2	10	-	-
Hungary	121	135	155	144	159	180	184	155	111	133	148	22%	-5%
Malta	-	-	-	3	5	9	2	7	-	3	-	-	-
Netherlands	187	164	173	176	198	190	215	216	189	196	280	50%	30%
Austria	154	142	115	141	137	101	121	127	106	99	119	-23%	-6%
Poland	653	647	692	619	656	673	699	664	545	475	448	-31%	-33%
Portugal	195	193	206	177	201	181	230	241	144	160	168	-14%	-30%
Romania	457	422	420	450	509	535	563	539	467	483	444	-3%	-18%
Slovenia	26	27	26	29	24	21	15	28	16	27	31	19%	11%
Slovakia	-	-	-	-	49	44	45	51	40	45	55	-	8%
Finland	58	73	56	71	69	73	79	54	69	73	-	26%	35%
Sweden	71	76	99	70	89	78	120	75	68	-	-	-	-
EU	6,282	6,077	6,237	6,399	6,607	6,470	6,684	6,447	5,167	5,415	5,992	-5%	-7%
Iceland	4	2	-	5	6	3	3	1	1	4	3	-	-
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-
Norway	28	44	47	24	32	32	31	31	21	18	38	36%	23%
Switzerland	93	100	86	97	68	70	93	75	97	86	91	-2%	21%

*LT = Long term change of last available year over 2012.
*ST = Short term change of last available year over 2019.

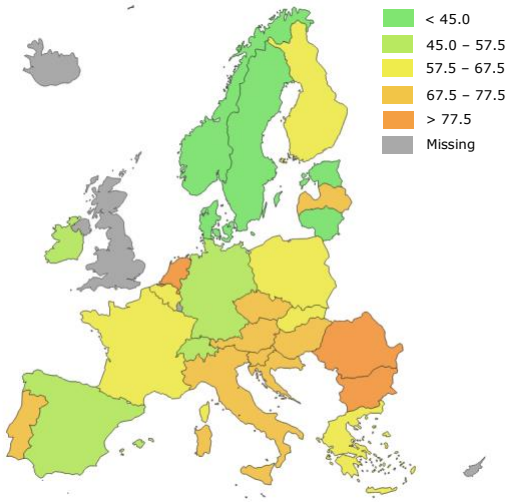
3.2 Mortality rate: number of road fatalities per million inhabitants

On **average about 64 seniors per million senior inhabitants die in road crashes within the EU27**. The mortality rate varies considerably between the countries. Central and east European Member States tend to have higher mortality rates than the European average. Portugal and Italy also lie well above the EU average.

Figure 1. Senior fatalities (65+) per million senior inhabitants per country in the EU27 and EFTA (2022). Source: CARE, EUROSTAT



Notes:
- Cyprus, Luxembourg, 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 values were imputed with the last known value in the series.

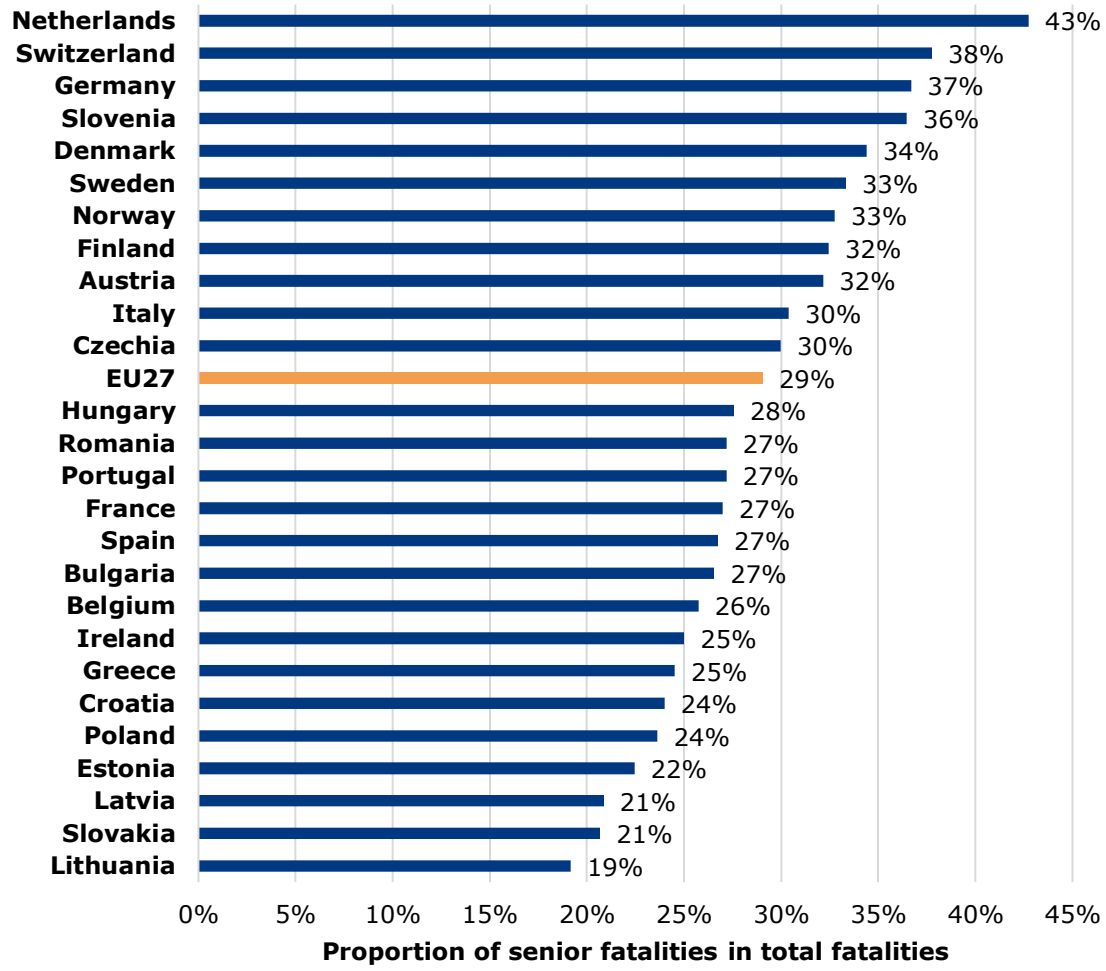


3.3 Share of fatalities among seniors in the total number of road fatalities

Mortality is an important indicator but does not consider differences in the general state of road safety performance across countries. In other words, the mortality rate for seniors in a specific country may be high, as the total mortality rate for all age groups is high. Therefore, it is important to have a look at the proportion or share of senior fatalities within the total number of road fatalities.

Observations for senior fatalities based on the share of senior fatalities in the total number of fatalities are different from those based on the mortality rate. Some countries with good overall road safety records and a long tradition of safety such as the Netherlands, Sweden and Switzerland have relatively high ratios of road mortality among older people with respect to the rest of the population. On the other hand, most central and eastern European Member States have a better ranking when it comes to the share of seniors killed in the total number of fatalities, which means that the high road mortality for seniors in those countries can partly be explained by the high mortality for all road users, regardless of their age.

Figure 2. Proportion of senior fatalities (65+) in the total number of fatalities, per country in the EU27 and EFTA (2022). Source: CARE



Notes:
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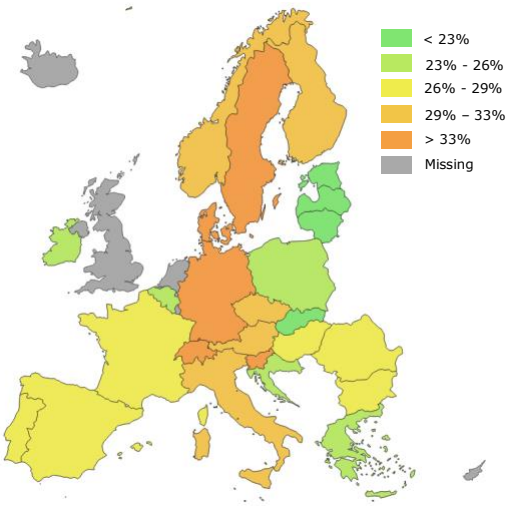
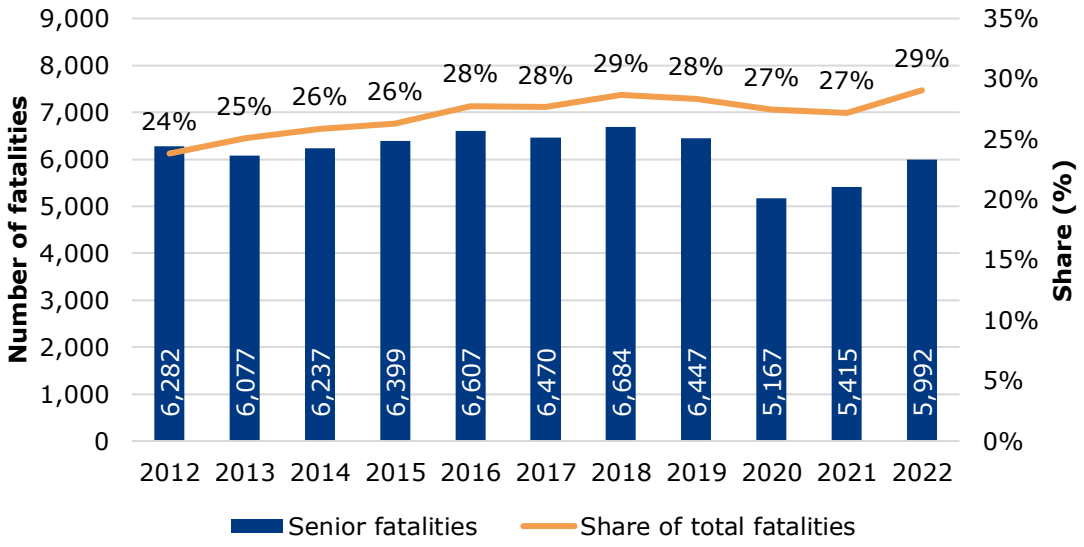
- For Ireland, Greece, Latvia, Finland and Sweden the missing values were imputed with the last known value in the series.



3.4 Trend in the number of fatalities

The **number of senior fatalities remained at a relatively stable** level between 6,000 and 7,000 fatalities during 2012 and 2019. In the years 2020 and 2021 fatalities in this age group decreased considerably (with 23% between 2019 and 2020) but has increased again since then. The **relative proportion of fatalities has increased constantly since the year 2012 to 2018 from 24% to 29%**, dropped slightly to 27% in 2020 and 2021 and increased in 2022 again (29%).

Figure 3. Annual number of senior fatalities (65+), and their share in the total number of fatalities in the EU27 (2012-2022). Source: CARE



The table below shows the trend of senior fatalities divided into 5-year age groups. Looking at the total long-term trend, only a **slight overall decrease can be observed (-5%).** Fatalities have decreased between 2012 and 2022 in the age groups **70–74 (-8%), 75-79 (-22%) and 80-84-year-olds (-16%)** but increased in the age groups **65-69 (+9%)** and **85+(+28%)**.

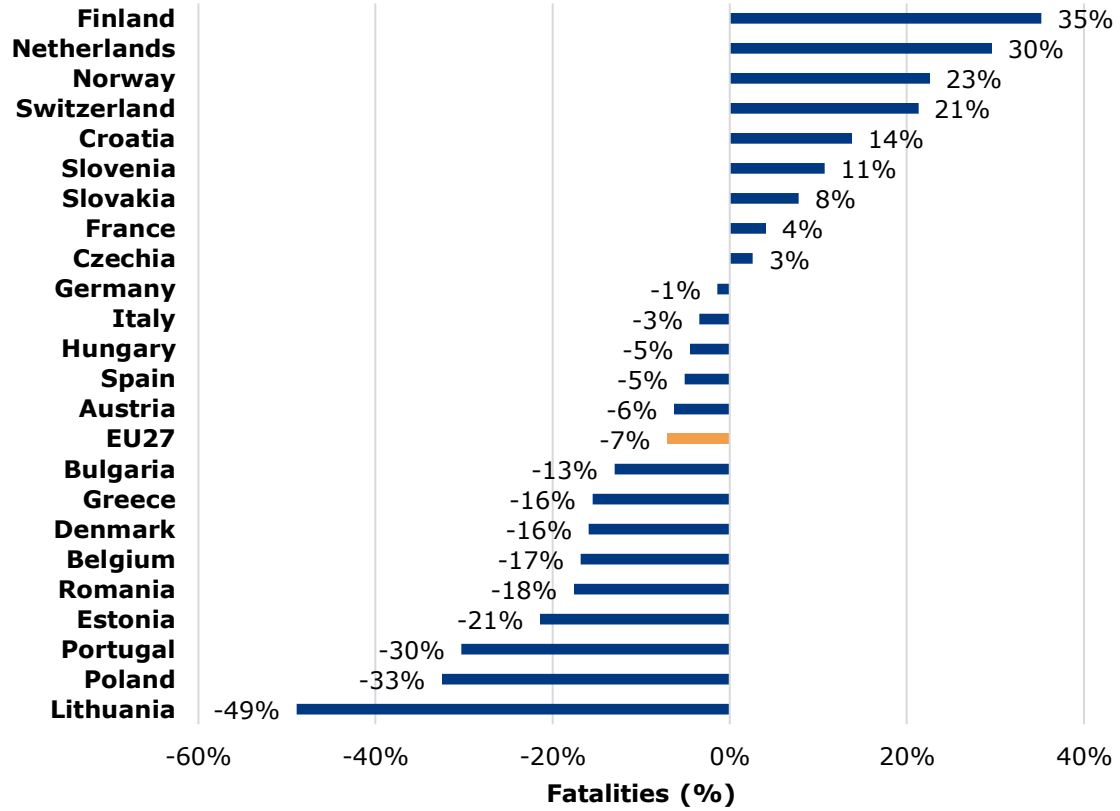
Table 2. Annual number of senior fatalities (65+) by 5-year age categories in the EU27 (2012-2022). Source: CARE

	2012	2019	2020	2021	2022	LT*
65-69	1,225	1,422	1,167	1,193	1,333	9%
70-74	1,389	1,288	1,136	1,191	1,279	-8%
75-79	1,488	1,328	991	1,046	1,156	-22%
80-84	1,290	1,249	1,037	1,044	1,086	-16%
85+	891	1,160	836	941	1,138	28%
Total	6,282	6,447	5,167	5,415	5,992	-5%

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

The trend in the number of senior fatalities for individual EU countries is calculated by looking at the short-term trend, comparing **2019-2022**. Using this trend indicator, **a decrease of 7% for the EU27** can be observed. **When looking at the trend in individual countries, it should be noted that the fatality numbers in small countries are very low.** Hence, the changes observed may be subject to random fluctuations. An example is Cyprus, where an increase of 11 fatalities shows a high percentage change. In countries with a high total number of senior fatalities (mostly due high number of inhabitants) different trends regarding senior fatalities can be observed. Looking at the **short-term change, Poland (-33%) and Romania (-18%) had a high reduction** rate and Spain, Italy and Germany had smaller average reduction rates (-5% to -1%) between 2019 and 2022. On the other hand, **the Netherlands had an increase in senior fatalities of +30% and Croatia had a +14% increase**.

Figure 4. Percentage short term change in the number of senior fatalities (65+) per country in the EU27 and EFTA (2019-2022). Source: CARE



Notes:
- Cyprus, Luxembourg, Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the time series 2019-2022.
- Ireland, Latvia and Sweden are not included in the figure because there is no data on fatalities in the years 2021 and 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 3. Number of and trend in senior fatalities (65+) per country in the EU27 and EFTA (2012-2022). Source: CARE

	2012	2019	2020	2021	2022	ST*	Miniplot: trend since 2012
Belgium	193	167	118	145	139	-17%	
Bulgaria	116	162	109	142	141	-13%	
Czechia	157	154	134	149	158	3%	
Denmark	44	63	57	41	53	-16%	
Germany	994	1,037	894	868	1,023	-1%	
Estonia	18	14	13	15	11	-21%	
Ireland	36	35	-	-	-	-	
Greece	248	181	141	153	-	-16%	
Spain	506	492	362	349	467	-5%	
France	745	845	642	761	880	4%	
Croatia	79	58	56	57	66	14%	
Italy	1,068	994	756	870	960	-3%	
Latvia	34	21	29	-	-	-	
Lithuania	-	45	45	29	23	-49%	
Hungary	121	155	111	133	148	-5%	
Netherlands	187	216	189	196	280	30%	
Austria	154	127	106	99	119	-6%	
Poland	653	664	545	475	448	-33%	
Portugal	195	241	144	160	168	-30%	
Romania	457	539	467	483	444	-18%	
Slovenia	26	28	16	27	31	11%	
Slovakia	-	51	40	45	55	8%	
Finland	58	54	69	73	-	35%	
Sweden	71	75	68	-	-	-	
EU27	6,282	6,447	5,167	5,415	5,992	-7%	
Norway	28	31	21	18	38	23%	
Switzerland	93	75	97	86	91	21%	

Notes:
- Cyprus, Luxembourg, 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

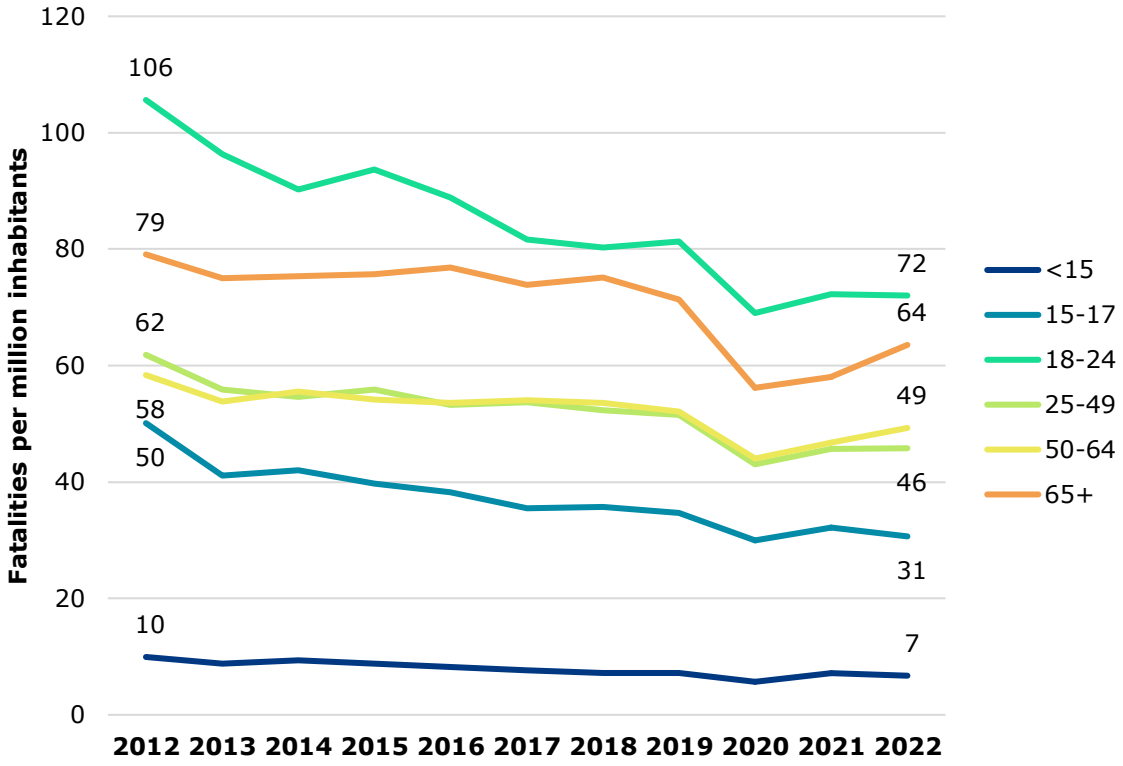
Generally, the **mortality rate in case of a crash increases with age**. An exception is the age group 18-24 as they have the highest mortality rate of all age groups. The trend over the last 10 years shows a **decrease of fatalities per million inhabitants in all age groups**, only the **mortality for seniors stayed almost the same** until 2019. In 2020, the proportion of fatalities also dropped considerable among the age group 65+. Since then, the numbers of fatalities per million inhabitants have increased again, especially looking at the age group 50+.

Table 4. 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
Latvia	5%	2%	12%	35%	24%	10%	9%	3%	131
Lithuania	3%	1%	15%	40%	22%	10%	5%	4%	119
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:
- Cyprus, Luxembourg, Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 senior fatalities (65+) in the year 2022.

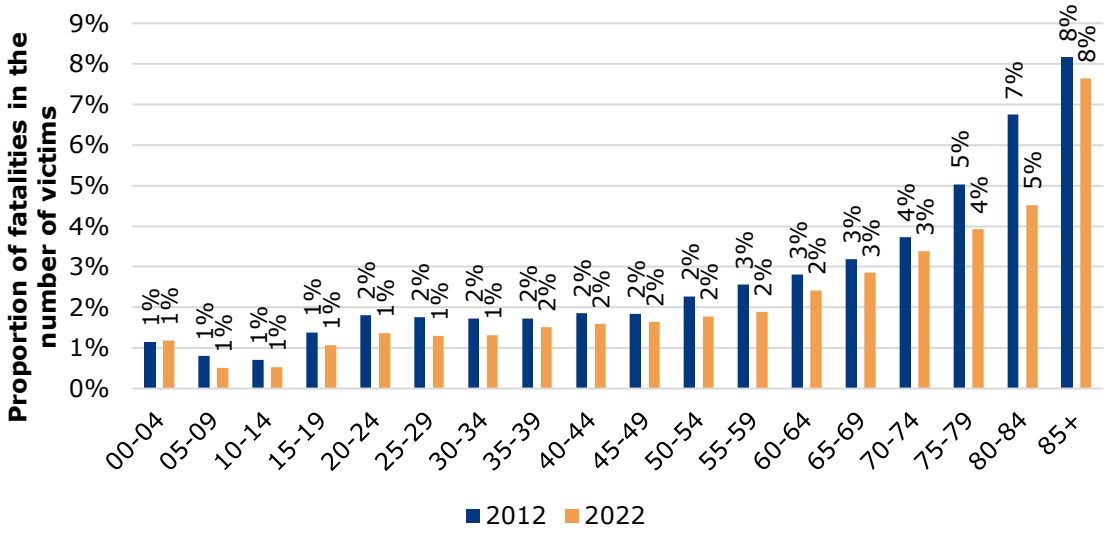
Figure 5. Annual number of fatalities per million inhabitants (=mortality) by age group in the EU27 (2012-2022). Source: CARE & EUROSTAT



High physical vulnerability among seniors is a major contributing factor to the high mortality rate within this demographic. When involved in equally serious collisions, seniors tend to sustain more severe injuries compared to other age groups, such as hip fractures. Additionally, older individuals require a longer healing period for similar injuries. The graph below illustrates the percentage of fatalities among registered traffic victims within each 5-year age category. **In 2022, 8% of registered victims aged 85+ died in crashes, compared to 2% of 40–44-year-olds**. Furthermore, the proportion of fatalities among those aged 75+ has decreased more substantially compared to other age groups since 2012. It is possible that the reduced mobility of this age group during the COVID-19 pandemic contributed to this trend.

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 6. 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

In 2022, 81% of road fatalities in the age group under 65 were male. In contrast, **the proportion of men among senior (65+) fatalities was much lower (68%)**. Both shares have remained relatively stable since 2012. The different proportions may be mainly due to the fact that the majority among seniors are women, especially in the oldest age group.

Figure 7. Distribution of senior fatalities (65+) and fatalities of people aged 0-64 by gender in the EU27 (2012-2022). Source: CARE

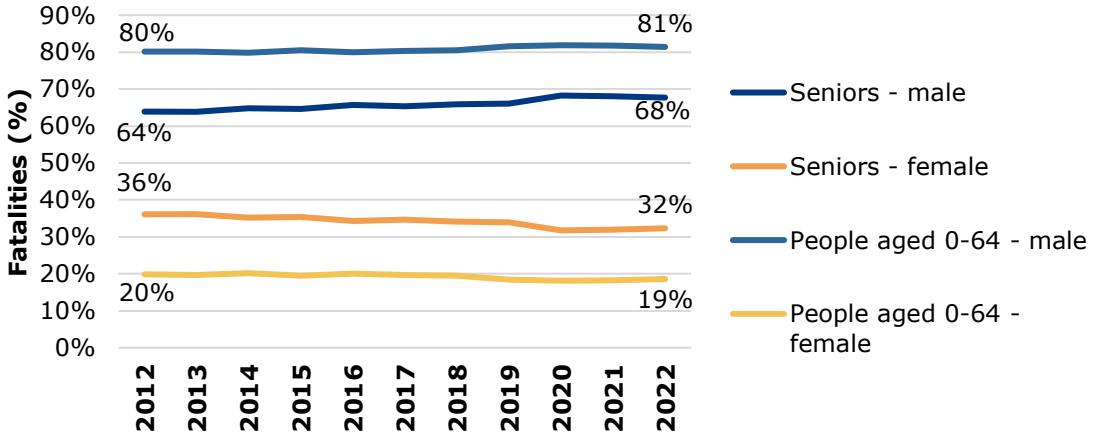
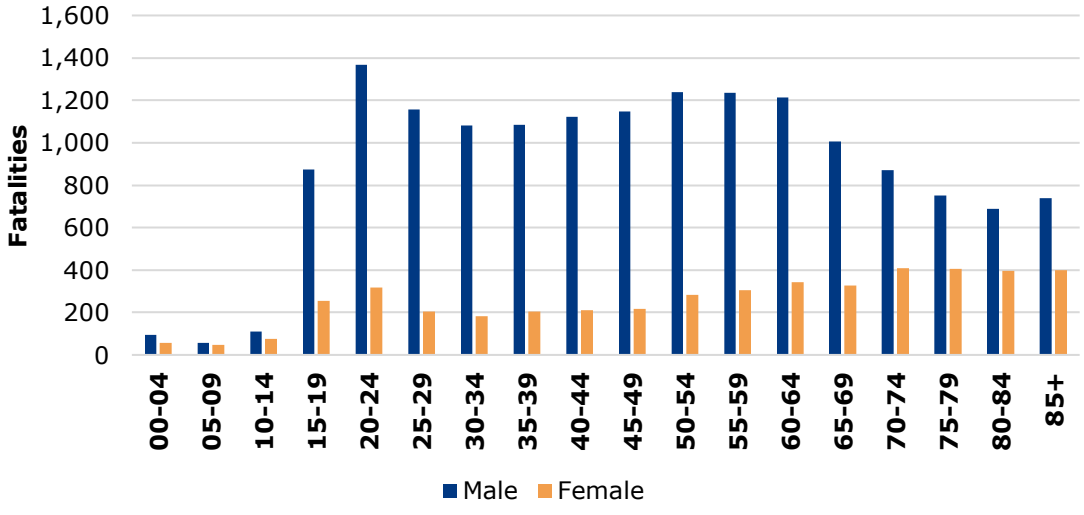
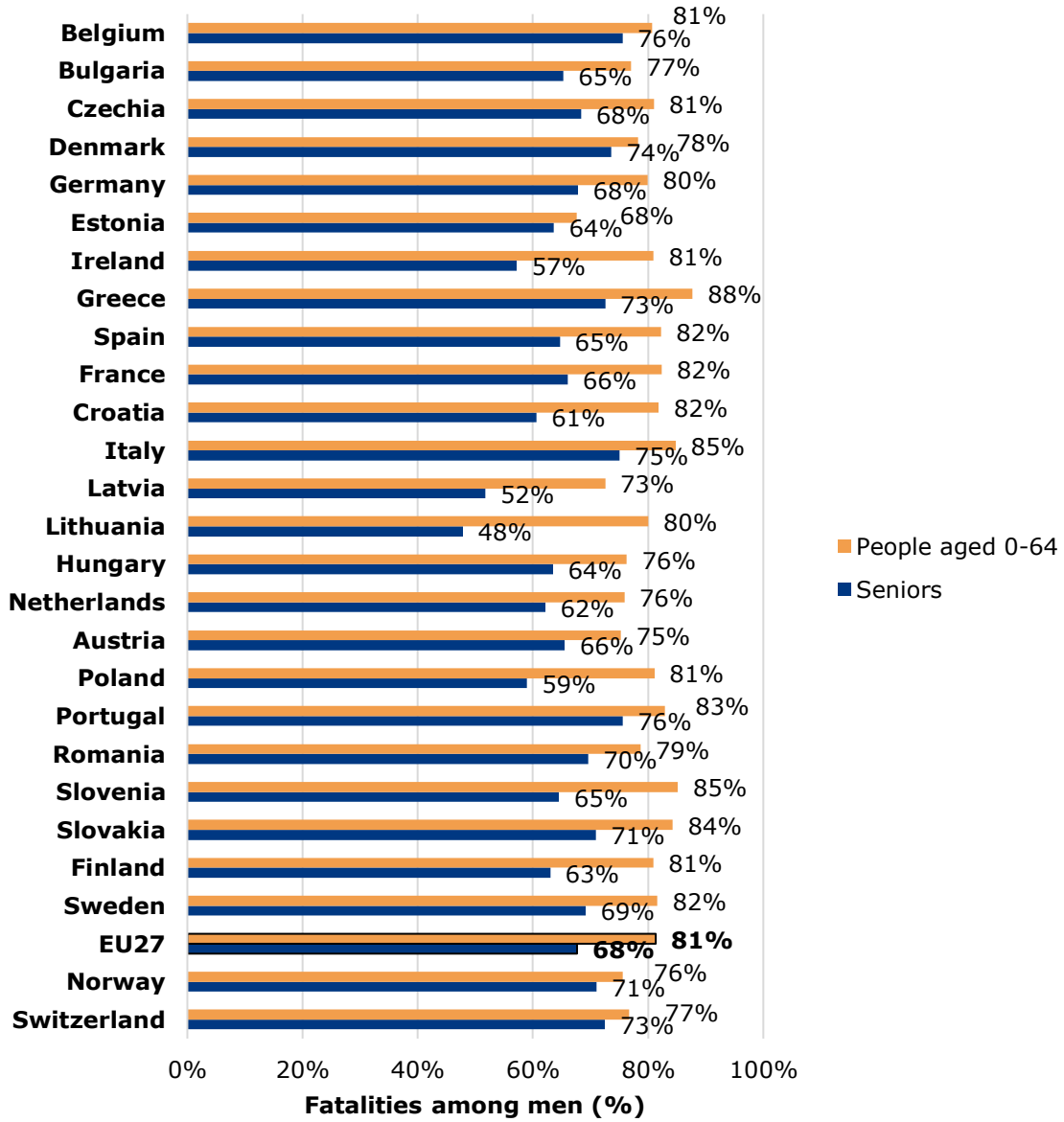


Figure 8. Distribution of fatalities over 5-year age categories and by gender in the EU27 (2022). Source: CARE



In all **EU27 and EFTA countries the share of men among fatalities in road traffic is very high (between 61% and 84%)**. Among seniors, the gender difference is less pronounced than in the age group up to 65 years in all countries. **The proportion of men is between 48% and 76% in the age group above 65 years.**

Figure 9. Share of men among senior fatalities (65+) and fatalities of people aged 0-64 per country in the EU27 and EFTA (2022). Source: CARE

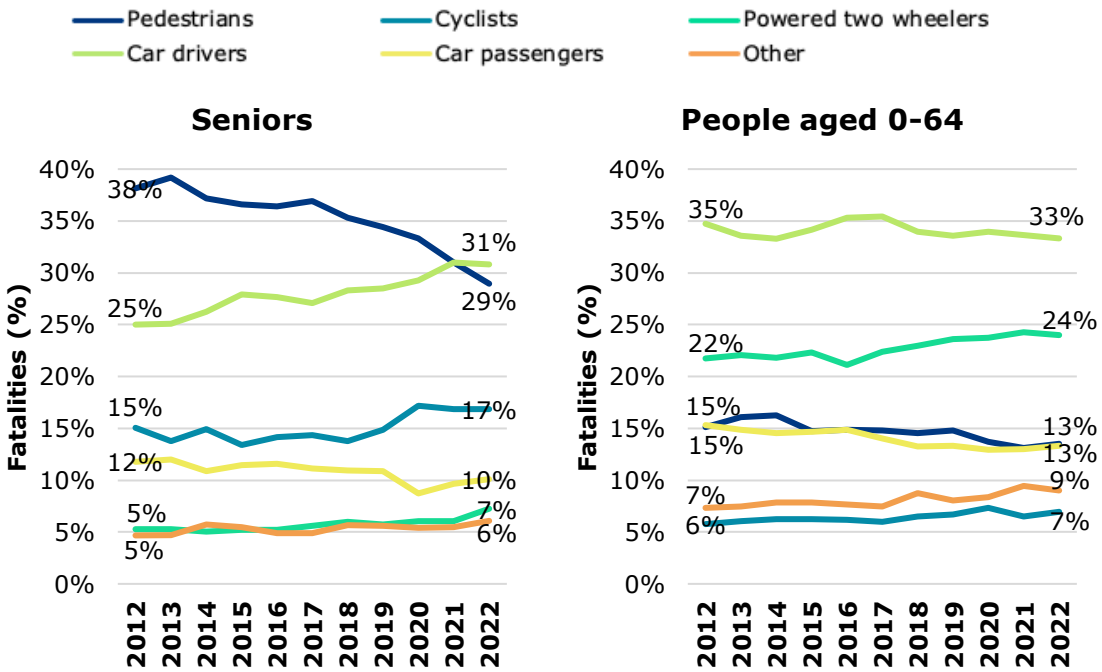


Notes:
- Cyprus, Luxembourg, Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- For Ireland, Greece, Latvia, Finland and Sweden the missing values were imputed with the last known value in the series.

4.2 Transport modes involved

The high proportion of pedestrian fatalities among senior citizens is noticeable. In 2022, almost **one third** of all fatalities among **seniors** were **pedestrians (29%)**. For people aged under 65 years this share amounted to 13%. Also, the **proportion of cyclist fatalities** was more than **double times higher for seniors (17%)** than for younger people (7%). Compared to people aged under 65, seniors had more than three times less fatalities on powered two wheelers in 2022. **The differences between the percentages for senior fatalities and all other fatalities (except seniors) reflect the mobility behaviour of seniors and their above-average vulnerability as a vulnerable road user.** While the trend per transport mode is relatively stable for all fatalities, a slight decrease of senior fatalities for pedestrians (2012: 38% to 2022: 29%) and a small increase for car drivers (2012: 25% to 2022: 31%) can be observed. While in 2012 the number of fatalities as car drivers among senior citizens was notably lower than for the rest of the population, in 2022 this number nearly equalised.

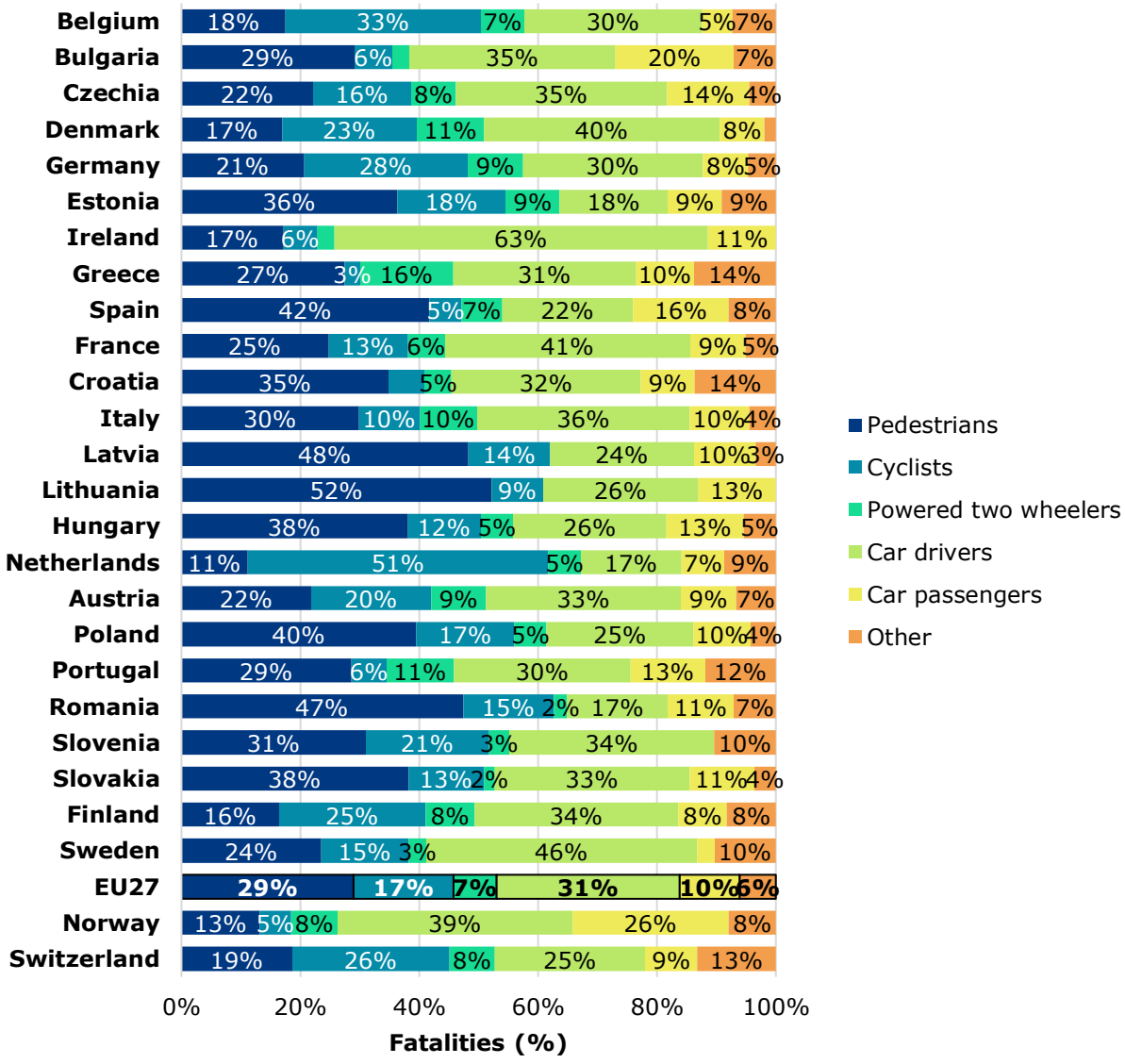
Figure 10. Distribution of senior fatalities (65+) and fatalities of people aged 0-64 by transport mode in the EU27 (2012-2022). Source: CARE



The **distribution of senior fatalities across various transport modes differs from country to country.** Some countries in the east of the EU have a particularly high proportion of pedestrians among senior fatalities. In Romania, Latvia and Lithuania, about one in two

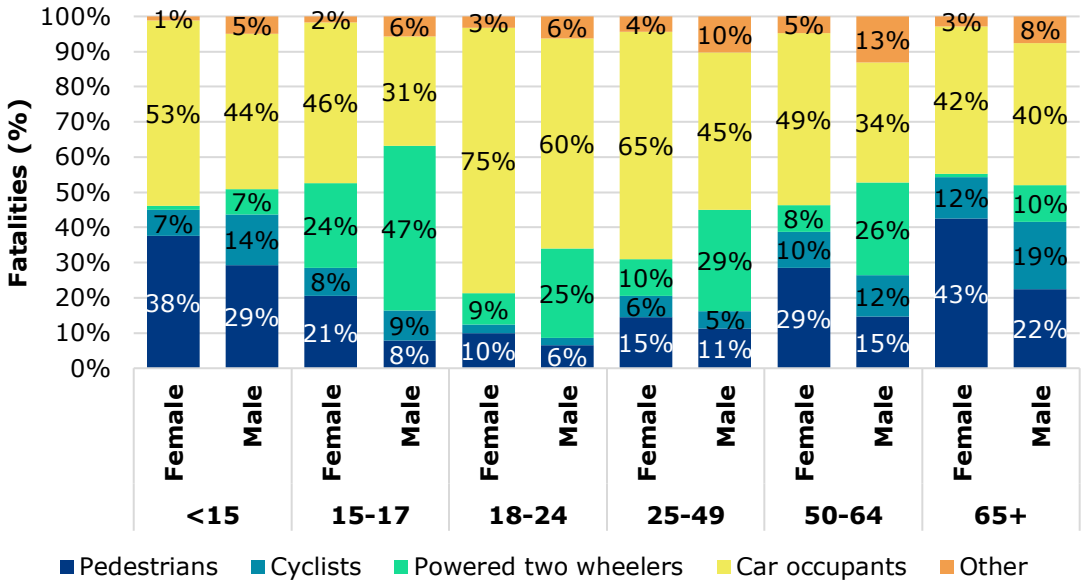
senior fatalities is a pedestrian. **It is noteworthy that countries with a high proportion of cyclists among senior fatalities (more than 25%) have a lower-than-average proportion of pedestrians among senior fatalities.** This applies, for example, to the Netherlands, Belgium and Germany. A possible explanation is that in countries with many cyclist fatalities, seniors travel proportionally fewer kilometres walking. Countries with a high proportion of senior fatalities amongst car occupants are Ireland, Sweden, France, Denmark and Norway. These national differences can probably partly be explained by the specific mobility behaviour of seniors in each specific country.

Figure 11. Distribution of senior fatalities (65+) by transport mode per country in the EU27 and EFTA (2022). Source: CARE



Notes:
- Cyprus, Luxembourg, 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 values were imputed with the last known value in the series.

Figure 12. Distribution of fatalities by age, gender and transport mode in the EU27 and EFTA (2022). Source: CARE

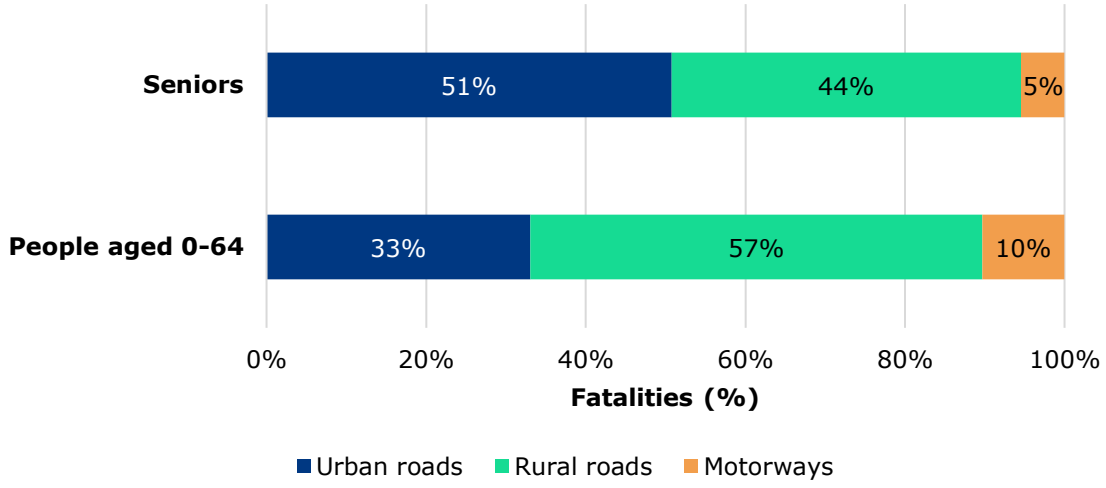


5. Location

5.1 Road type

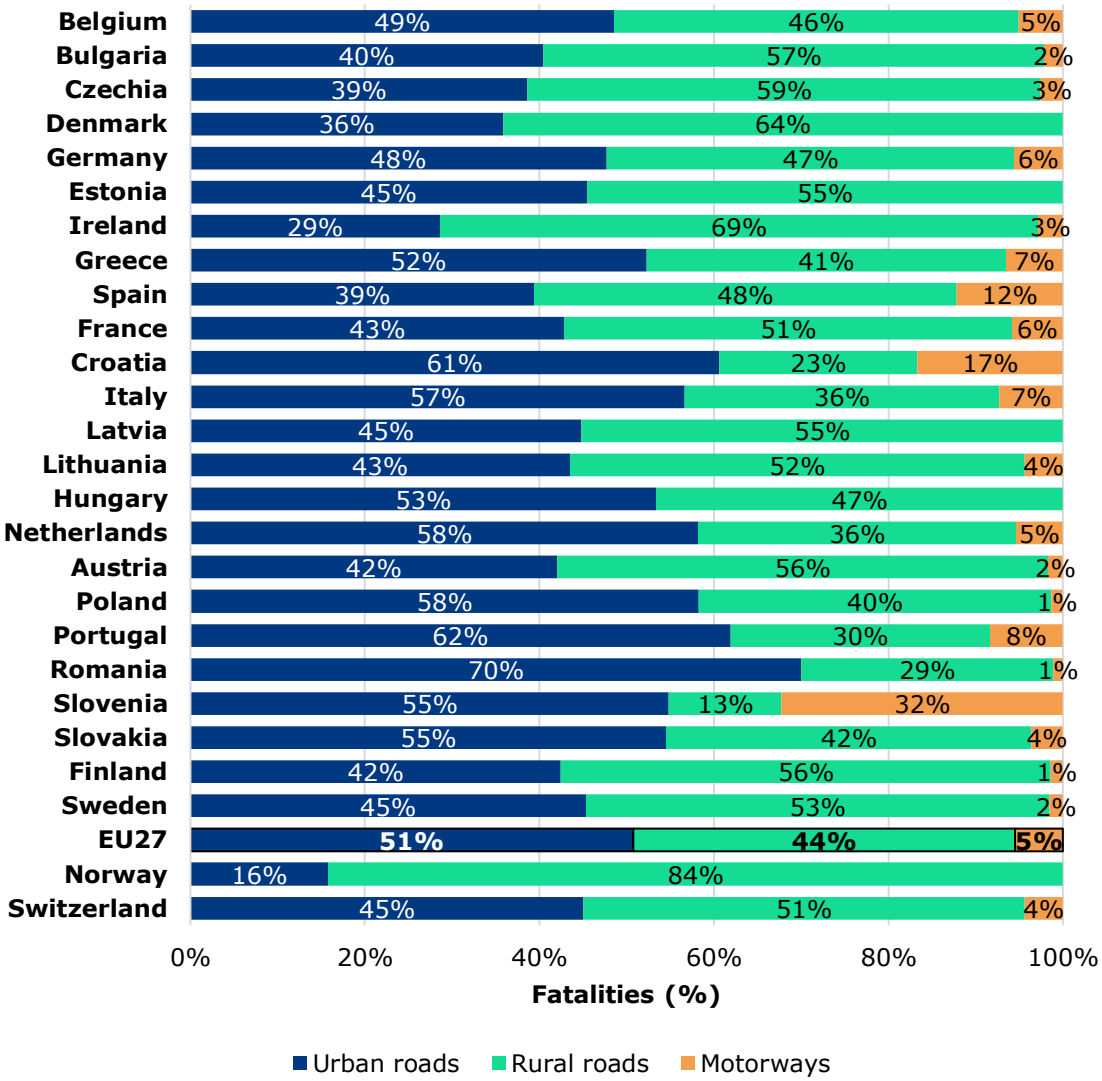
Fatalities among seniors predominantly occur on urban roads, accounting for 51%, which is notably higher than the proportion for people aged **under 65 (33%).** Furthermore, senior fatalities are also characterised by a **lower proportion on motorways (5% versus 10%) and on rural roads (44% versus 57%)** than people aged under 65.

Figure 13. Distribution of senior fatalities (65+) and fatalities of people aged 0-64 by 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 Romania, Portugal and Croatia had a high proportion of seniors killed on urban roads (60% or more) in 2022. The **northern EU27 and EFTA countries (Ireland, Norway, Sweden, Finland, Estonia, Latvia) had the highest proportion of senior fatalities on rural roads (55% or more)** in 2022, which was notable higher than the EU average (44%).

Figure 14. Distribution of senior fatalities (65+) by road type per country in the EU27 and EFTA (2022). Source: CARE

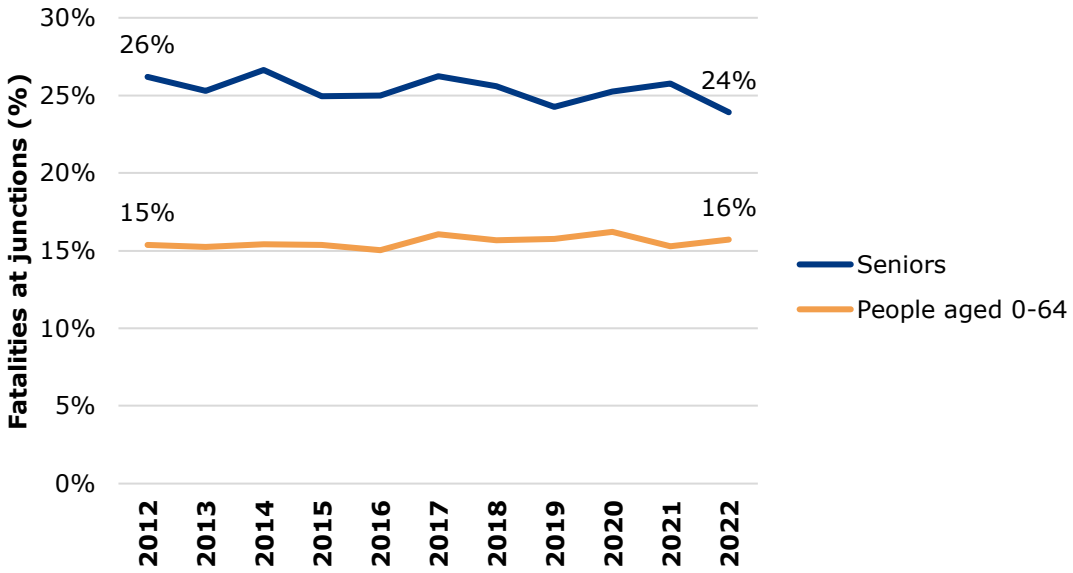


Notes:
- Cyprus, Luxembourg, Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- For Ireland, Greece, Latvia, Finland and Sweden the missing values were imputed with the last known value in the series.

5.2 Junction

Compared to other age groups, **fatalities at junctions are more likely to happen among seniors (2022, 24% versus 16%).** It should be noted that the age group 15-17 years has also high numbers of fatalities at junctions (2022, 24%).

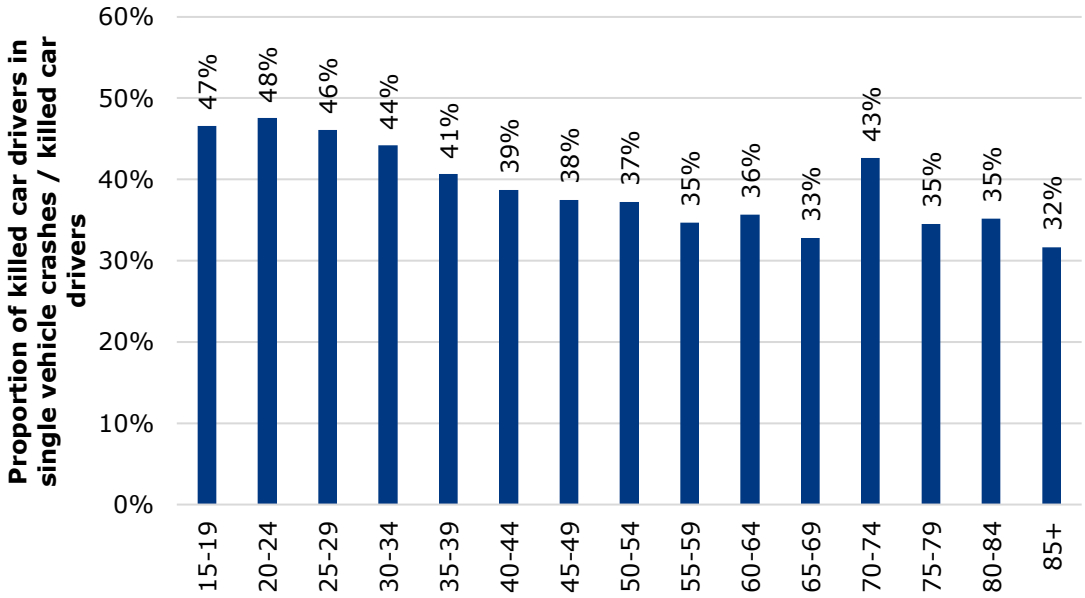
Figure 15. Proportion of senior fatalities (65+) and fatalities of people aged 0-64 at junctions in the EU27 (2012-2022). Source: CARE



6. Type of collision

Among **senior car drivers** who lost their lives in 2022, approximately **one-third were involved in single-vehicle crashes**, meaning crashes that only involved one vehicle and no pedestrians. This percentage remains relatively consistent across the entire age group, ranging from 65 to 85+. In contrast, **younger adults have a noticeably higher proportion of single crashes**, with nearly 50% occurring in those under 30 years of age. However, this percentage gradually decreases up to the age of 69.

Figure 16. Proportion of killed car drivers in single car crashes in the total number of car drivers killed, by 5-year age categories, in the EU27 (2022). Source: CARE

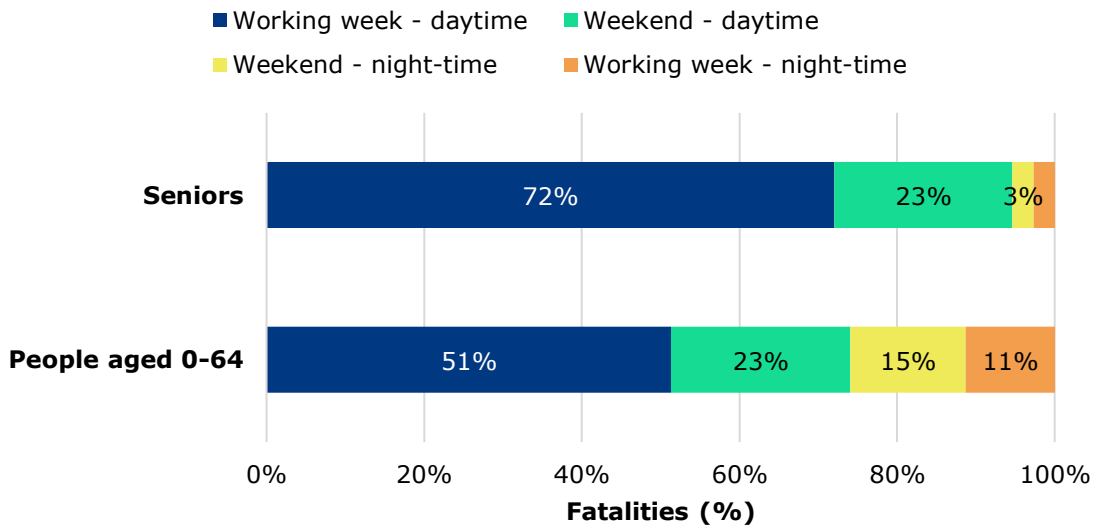


7. Time

7.1 Period of the week

In 2022, more than two-thirds of senior fatalities occurred during daytime and the working week, while people under the age of 65 accounted for approximately half of all fatalities during this time period. The proportion of road fatalities among seniors during night-time (from 10 p.m. to 5.59 a.m.) was much lower, at 3% compared to 26% for fatalities among people aged under 65.

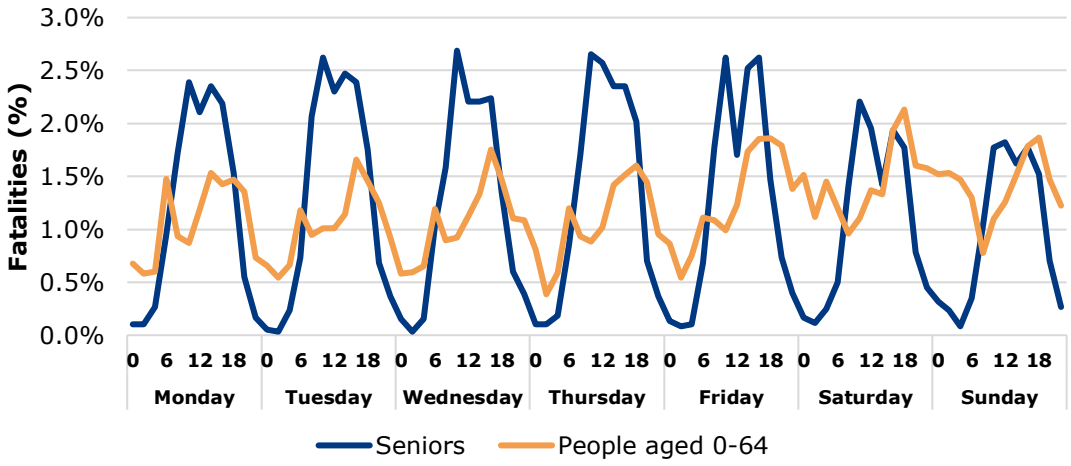
Figure 17. Distribution of senior fatalities (65+) and fatalities of people aged 0-64 according to period of the week in the EU27 (2022). Source: CARE



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

There are two noticeable peaks in senior fatalities during weekdays, specifically **during the morning hours from 10 to 12 am and in the late afternoon from 4 to 6 pm**. The distribution of senior fatalities throughout the day only differs slightly between the working week and the weekend.

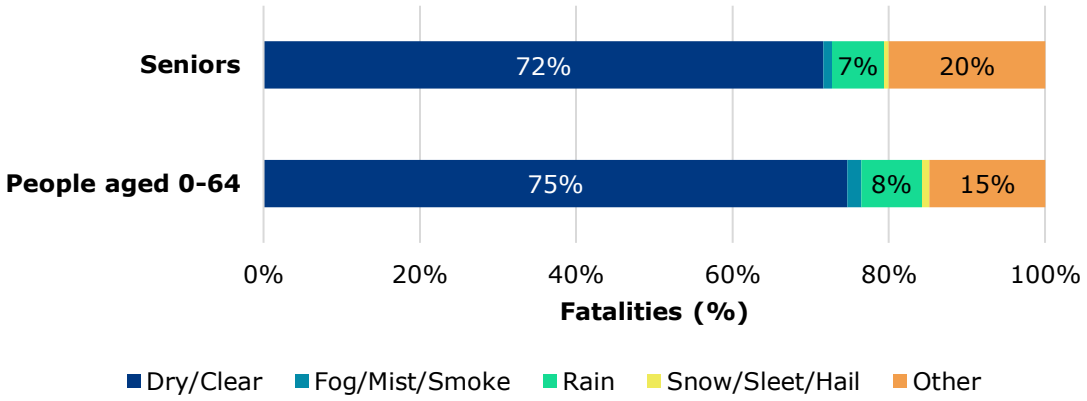
Figure 18. Distribution of senior fatalities (65+) and fatalities of people aged 0-64 by day of the week and hour in the EU27 (2022). Source: CARE



7.3 Weather

In terms of weather conditions, there is a little difference across age groups. Approximately **72% of senior fatalities in 2022 occured in dry/clear weather**, 7% in rain and 20% during other or unknown conditions.

Figure 19. Distribution of senior fatalities (65+) and fatalities of people aged 0-64 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.

Urban roads (roads inside urban areas)

Public roads inside urban boundary signs.

Seniors
Persons aged 65 years and older.

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

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.

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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