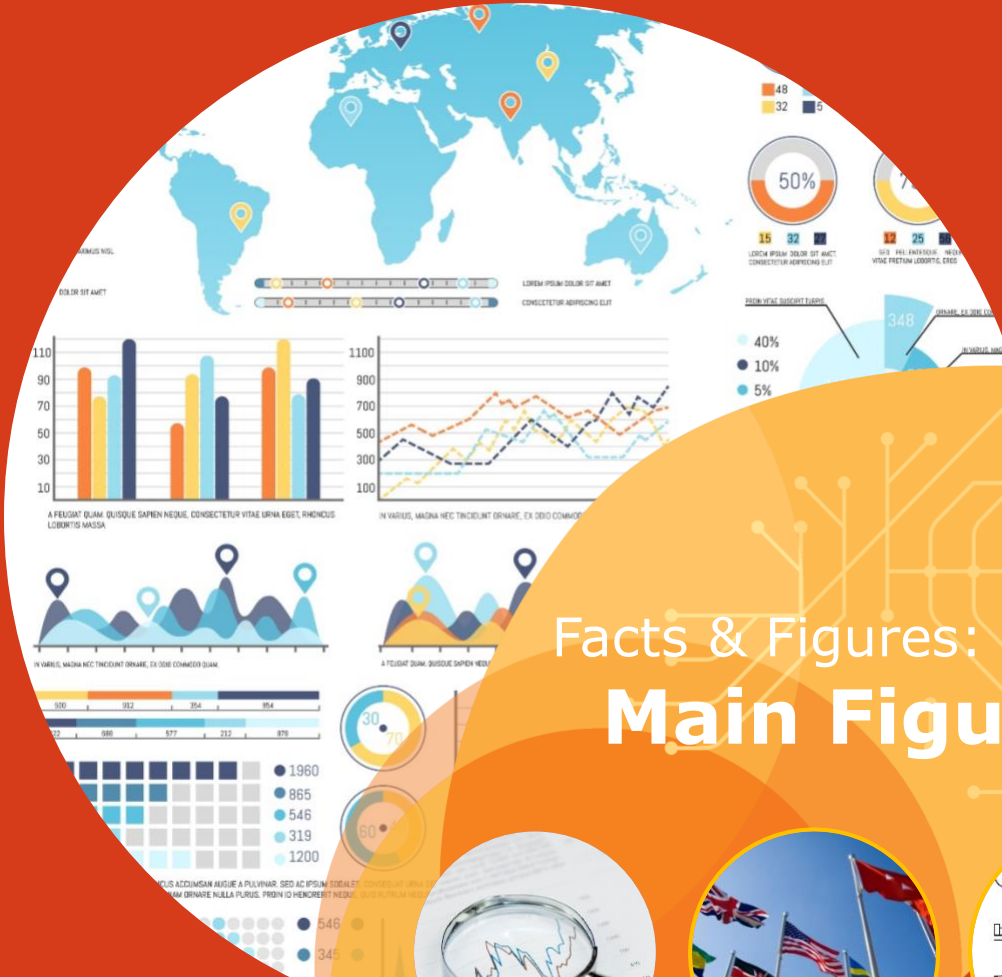




European Commission



Facts & Figures: Main Figures



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

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1. Key facts

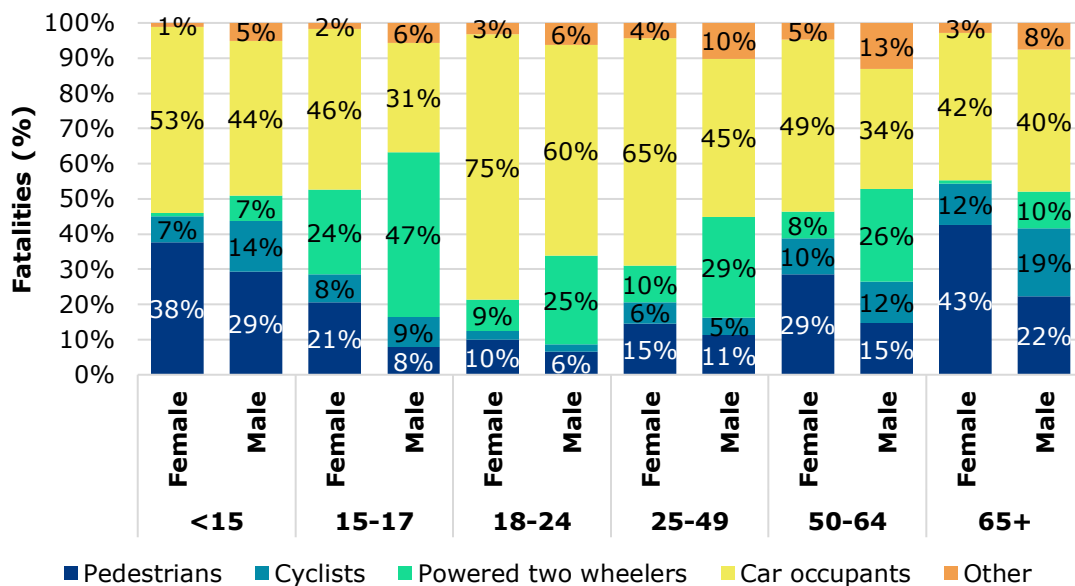
This Facts and Figures report looks at road fatalities on European roads. All observations reported were derived from the available data. The statistical significance of differences or relations between values has not been tested.

Road fatalities in the EU27, 2022

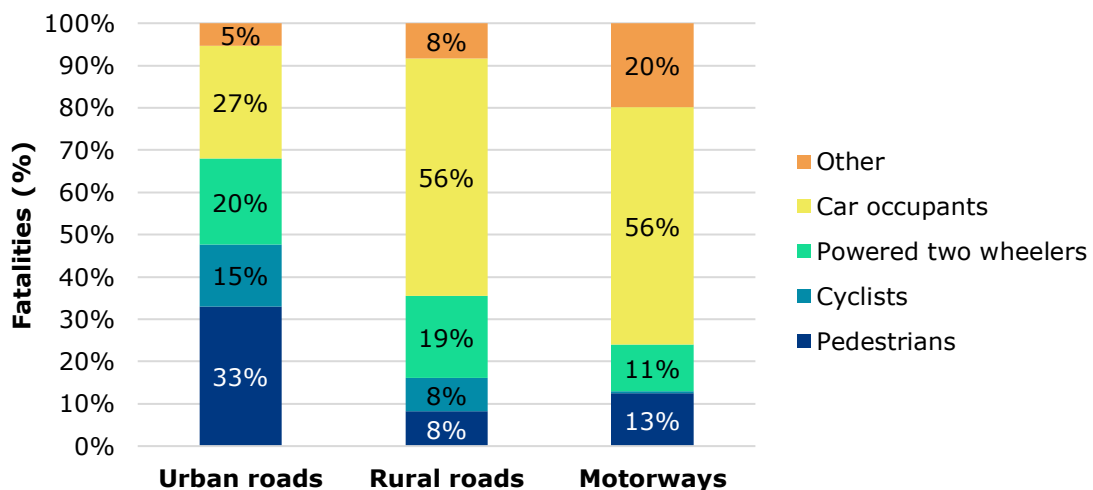


- 20,634 fatalities
- -22% decrease since 2012

Gender, age and transport modes



Road type and transport modes



2. Summary

More than 20,600 people were killed in road crashes in the EU countries in 2022. The European Commission set the ambitious target to halve the number of road fatalities by 2030 compared to 2019. **The progress made so far is a 9% decrease in road fatalities for the EU27 between 2019 and 2022**, with lower fatalities numbers in almost all the countries. Since 2012, the decrease amounts to 22%. Fatality rates are lower in the north and west in comparison to the south and east.

Far more males than females are killed in road crashes: in 2022: **77% of all fatalities were male and 23% were female** in the EU27. **By the age of 15 the share of males is at least twice as high as that of females.** Since 2012, the highest decrease in road fatalities was recorded for the age groups 15 to 17 years (-39%) and 18 to 24 years (-38%), while the number of road fatalities increased considerably for the age group 85+ (27%).

Vulnerable road users (pedestrians, cyclists, moped riders, and motorcyclists) **make up a large part of all road fatalities, with an average of 47% in the EU27 in 2022.** Car occupants account for 45%. The fatality number for pedestrians and car occupants decreased the most since 2012.

Overall, **9% of road fatalities in the EU in 2022 occurred on motorways, and 53% on rural roads and the remaining 38% on urban roads.** In some countries, the share of fatalities occurring on urban roads exceeds the one on rural roads. **On urban roads, the share of killed pedestrians is highest with 33%.** Indeed, vulnerable road users account for almost 70% of all fatalities on urban roads. Regarding the spread of fatal crashes over the course of a year, in general, higher shares of fatalities occur during the second half of the year. Pedestrian fatalities peak in December and powered two wheelers' fatalities during the summer months, July and August.

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.

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. Road fatalities 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	827	764	745	762	670	609	604	646	499	516	540	-35%	-16%
Bulgaria	601	601	661	708	708	682	610	628	463	561	531	-12%	-15%
Czechia	742	654	688	734	611	577	656	618	518	532	527	-29%	-15%
Denmark	167	191	182	178	211	175	171	199	163	130	154	-8%	-23%
Germany	3,600	3,339	3,377	3,459	3,206	3,180	3,275	3,046	2,719	2,562	2,788	-23%	-9%
Estonia	87	81	78	67	71	48	67	52	59	55	49	-44%	-6%
Ireland	163	188	192	162	182	154	135	140	146	137	155	-5%	11%
Greece	988	879	795	793	824	731	700	688	584	624	635	-36%	-8%
Spain	1,902	1,680	1,688	1,689	1,810	1,830	1,806	1,755	1,370	1,533	1,746	-8%	-1%
France	3,653	3,268	3,380	3,459	3,471	3,444	3,246	3,237	2,538	2,931	3,260	-11%	1%
Croatia	393	368	308	348	307	331	317	297	237	292	275	-30%	-7%
Italy	3,753	3,401	3,381	3,428	3,283	3,378	3,334	3,173	2,395	2,875	3,159	-16%	0%
Cyprus	51	44	45	57	46	53	49	52	48	45	37	-28%	-29%
Latvia	177	179	212	188	158	136	148	132	139	147	113	-36%	-14%
Lithuania	302	256	267	242	188	191	173	186	175	148	120	-60%	-36%
Luxembourg	34	45	35	36	32	25	36	22	26	24	36	6%	64%
Hungary	605	591	626	644	607	625	633	602	460	544	537	-11%	-11%
Malta	9	17	10	11	23	19	18	16	12	9	26		63%
Netherlands	562	476	476	531	533	535	598	586	515	509	655	17%	12%
Austria	531	455	430	479	432	414	409	416	344	362	370	-30%	-11%
Poland	3,571	3,357	3,202	2,938	3,026	2,831	2,862	2,909	2,491	2,245	1,896	-47%	-35%
Portugal	718	637	638	593	563	602	700	688	536	561	618	-14%	-10%
Romania	2,042	1,861	1,818	1,893	1,913	1,951	1,867	1,864	1,644	1,779	1,633	-20%	-12%
Slovenia	130	125	108	120	130	104	91	102	80	114	85	-35%	-17%
Slovakia	352	251	295	310	275	276	260	270	247	247	266	-24%	-2%
Finland	255	258	229	270	258	238	239	211	223	225	196	-23%	-7%
Sweden	285	260	270	259	270	253	324	221	204	210	227	-20%	3%
EU	26,500	24,226	24,136	24,358	23,808	23,392	23,328	22,756	18,835	19,917	20,634	-22%	-9%
Iceland	9	15	4	16	18	16	18	6	8	9	9	-	-
Liechtenstein	1	2	3	2	-	2	-	-	1	-	2	-	-
Norway	145	187	147	117	135	106	108	108	93	80	116	-20%	7%
Switzerland	339	269	243	253	216	230	233	187	227	200	241	-29%	29%

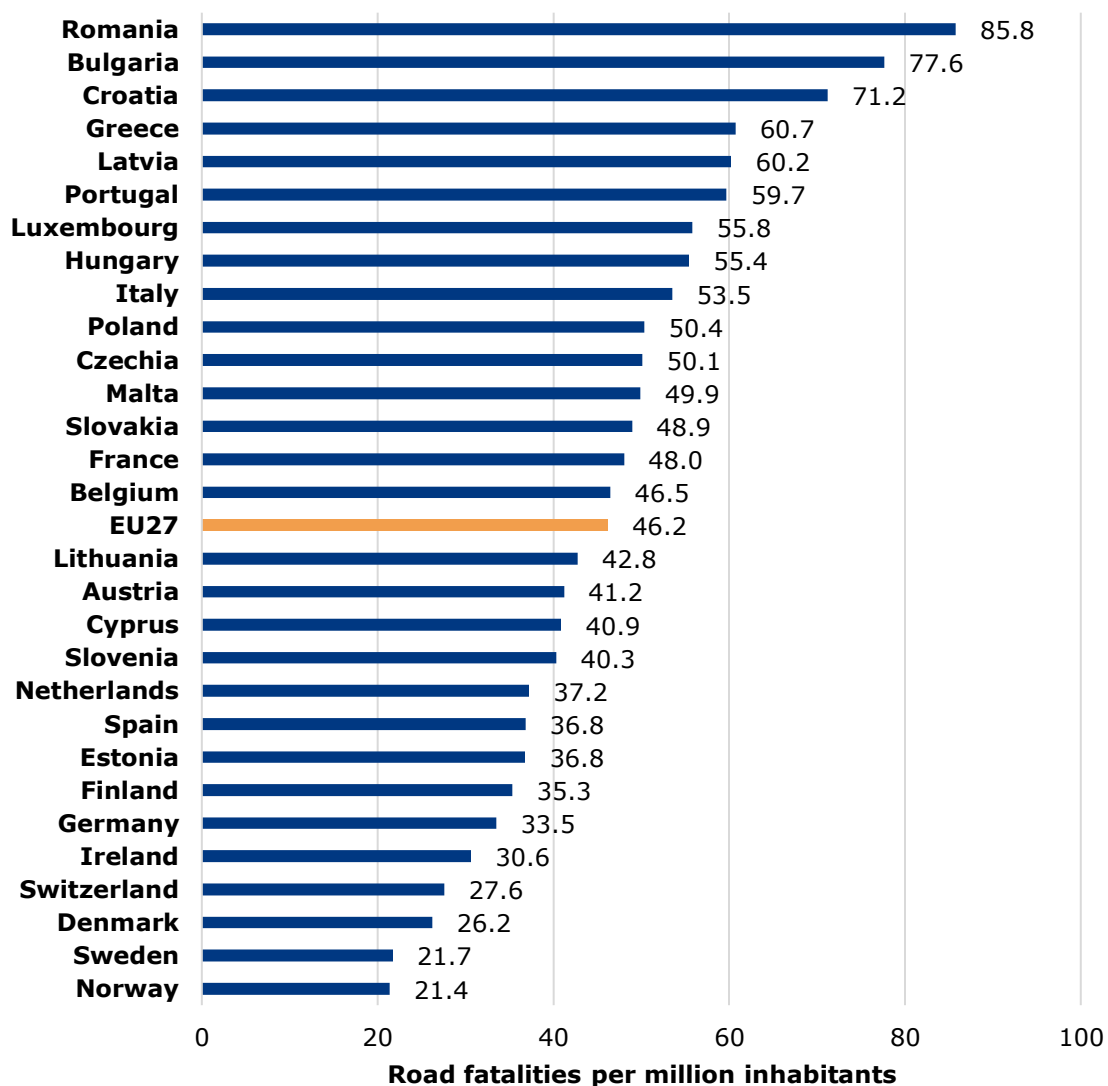
*LT = Long term change of last available year over 2012.

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

3.2 Mortality rate: number of road fatalities per million inhabitants

Figure 1 shows the rate of fatalities per million inhabitants in each of the EU and EFTA countries as well as the EU average for 2022. **Romania, Bulgaria, and Croatia record the highest rate of road user deaths, while Norway and Sweden have the lowest rate in 2022.**

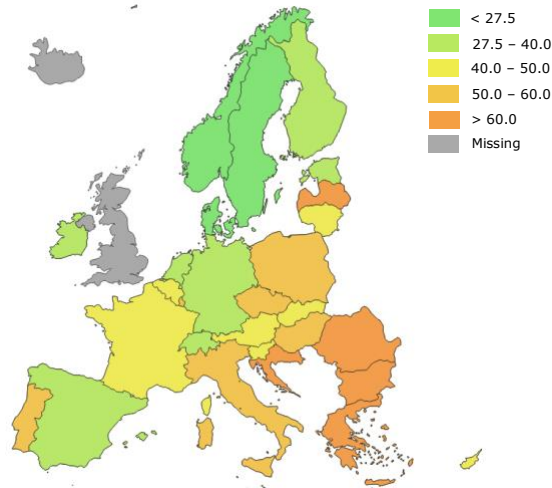
Figure 1. Road fatalities per million inhabitants per country in the EU27 and EFTA (2022). Source: CARE, EUROSTAT



Notes:

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

The geographical representation of fatality rates in the map below shows a **tendency of fatality rates to be lower in the north and west in comparison to the south and east**, which is the result of different historical backgrounds and road safety policies.



© Eurostat for the administrative boundaries

3.3 Trend in number of road fatalities

More than 20,600 people were killed in road crashes in the EU countries in 2022. The European Commission set the ambitious target to halve the number of road fatalities by 2030 compared to 2019. The table below shows the **progress made during the past decade, with an 9% decrease for the EU27 between 2019 and 2022 and with lower fatalities numbers in almost all the countries.**

Table 2. Number and trend in road fatalities per country in the EU27 and EFTA (2012-2022). Source: CARE

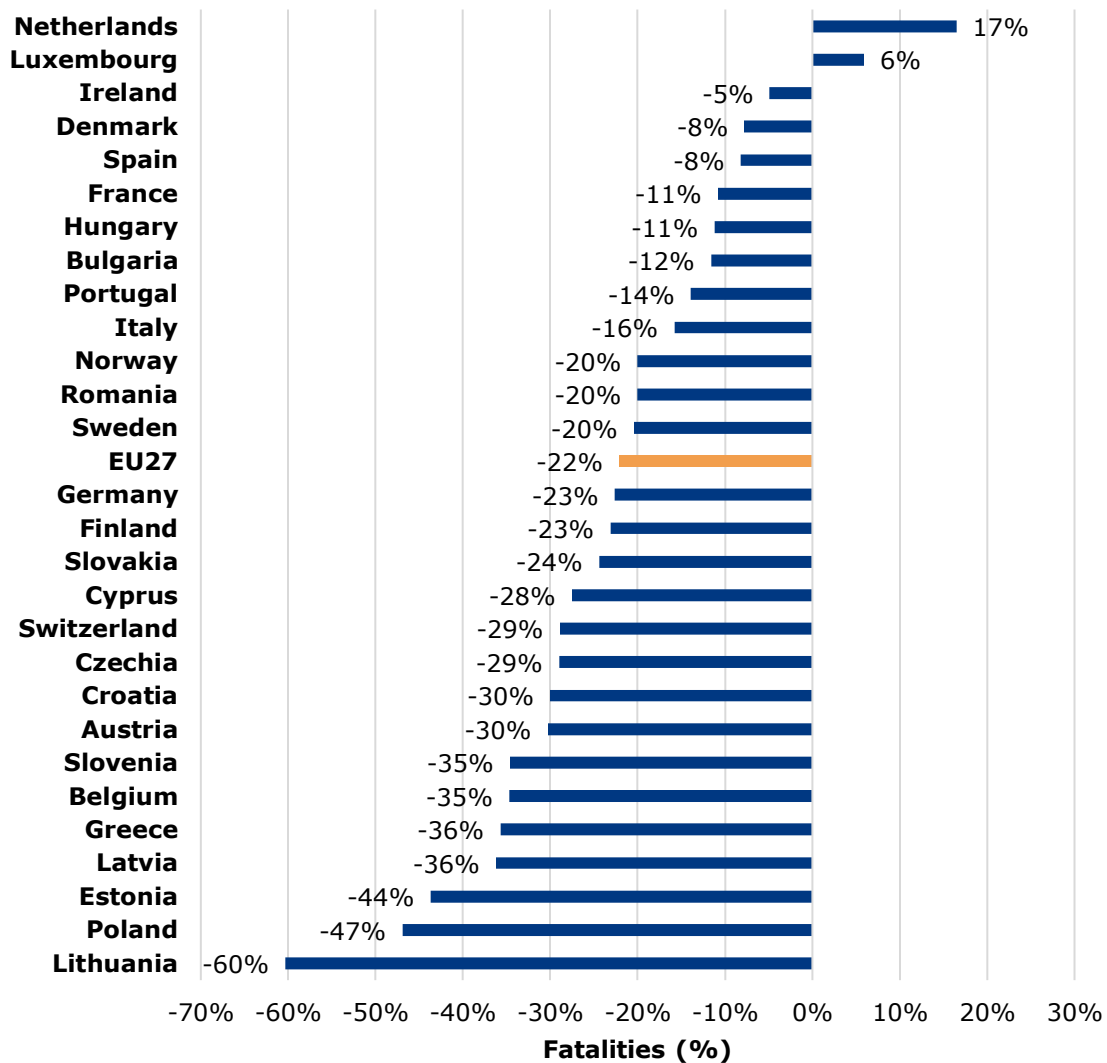
	2012	2019	2020	2021	2022	ST*	Miniplot: trend since 2012
Belgium	827	646	499	516	540	-16%	
Bulgaria	601	628	463	561	531	-15%	
Czechia	742	618	518	532	527	-15%	
Denmark	167	199	163	130	154	-23%	
Germany	3,600	3,046	2,719	2,562	2,788	-9%	
Estonia	87	52	59	55	49	-6%	
Ireland	163	140	146	137	155	11%	
Greece	988	688	584	624	635	-8%	
Spain	1,902	1,755	1,370	1,533	1,746	-1%	
France	3,653	3,237	2,538	2,931	3,260	1%	
Croatia	393	297	237	292	275	-7%	
Italy	3,753	3,173	2,395	2,875	3,159	0%	
Cyprus	51	52	48	45	37	-29%	
Latvia	177	132	139	147	113	-14%	
Lithuania	302	186	175	148	120	-36%	
Luxembourg	34	22	26	24	36	64%	
Hungary	605	602	460	544	537	-11%	
Malta	9	16	12	9	26	63%	
Netherlands	562	586	515	509	655	12%	
Austria	531	416	344	362	370	-11%	
Poland	3,571	2,909	2,491	2,245	1,896	-35%	
Portugal	718	688	536	561	618	-10%	
Romania	2,042	1,864	1,644	1,779	1,633	-12%	
Slovenia	130	102	80	114	85	-17%	
Slovakia	352	270	247	247	266	-2%	
Finland	255	211	223	225	196	-7%	
Sweden	285	221	204	210	227	3%	
EU27	26,500	22,756	18,835	19,917	20,634	-9%	
Norway	9	6	8	9	116	7%	
Switzerland	145	108	93	80	241	29%	

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

Notes:

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

Figure 2. Percentage change in the number of road fatalities per country in the EU27 and EFTA (2022 over 2012). Source: CARE



Notes:

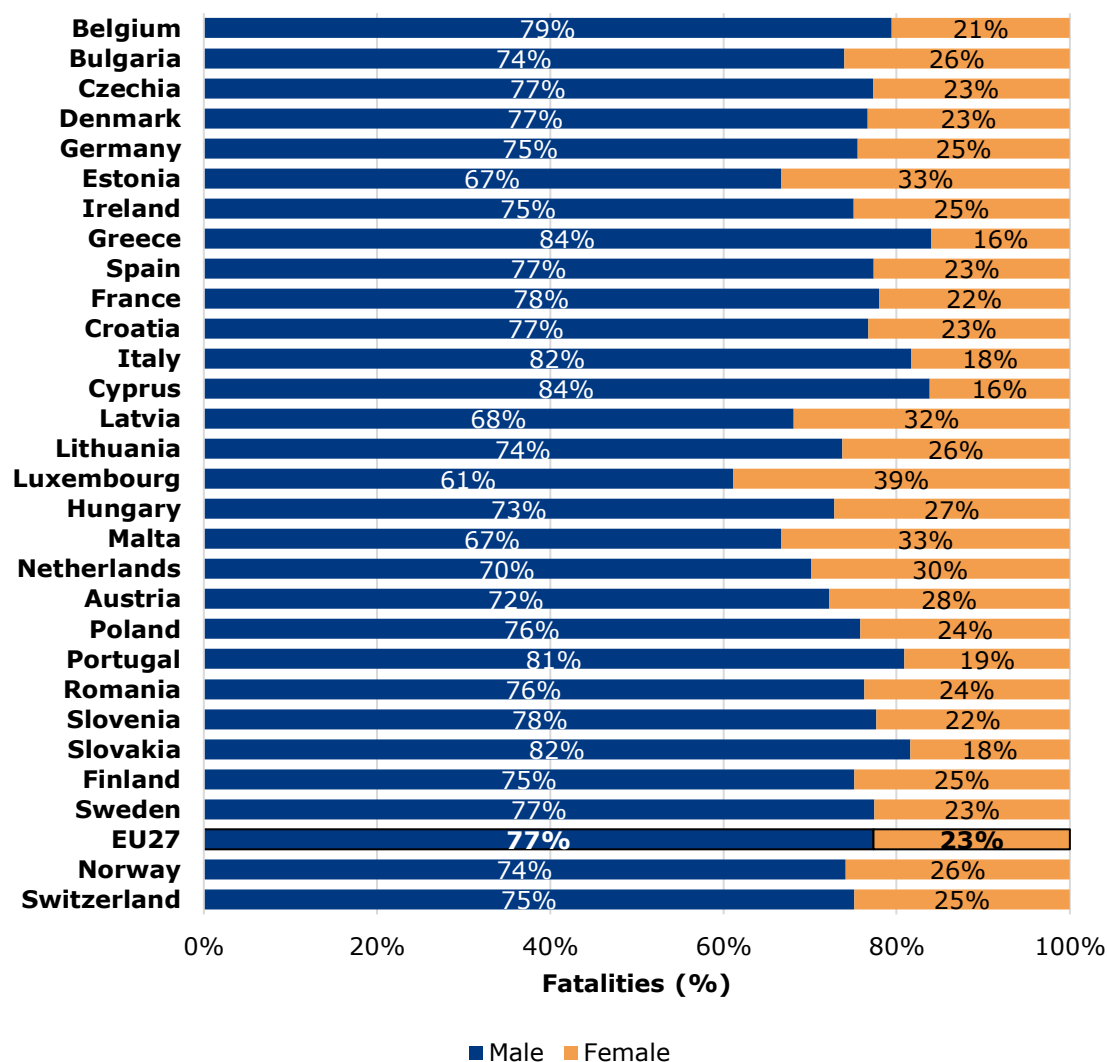
- Iceland and Liechtenstein are not included in the figure because there are less than 10 fatalities in the year 2022.
- For some countries with comparatively low numbers of fatalities, caution is required when interpreting the data due to considerable annual fluctuations.

4. Road user

4.1 Gender

Far more men than women are killed in road crashes in Europe. In 2022 **77% of all fatalities were male and 23% were female on average in the EU27.**

Figure 3. Distribution of overall road fatalities by gender per country in EU27 and EFTA (last available year). Source: CARE

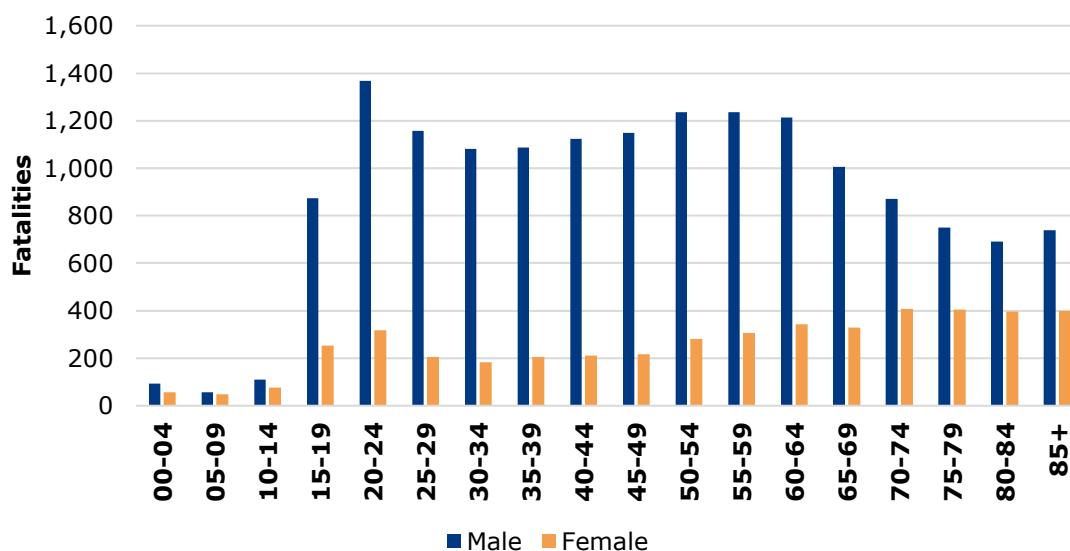


Notes:

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

Figure 4 shows that the proportion of killed men and women considerably varies by age groups. **From the age of 15 onwards the share of males is at least twice as high as the share of females** and this trend remains up to the age category of 70 to 74.

Figure 4. Distribution of fatalities over 5-year age categories and by gender in the EU27 (2022). Source: CARE



4.2 Age

Figure 5 compares the number of road fatalities per million inhabitants per age group over the past decade. The numbers have decreased in all age groups between 2012 and 2022, and the ranking of age groups remained broadly the same.

Demographic change has contributed to the changes. The population of the EU grew considerably over the decade, but the growth occurred mainly among the older age groups.

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

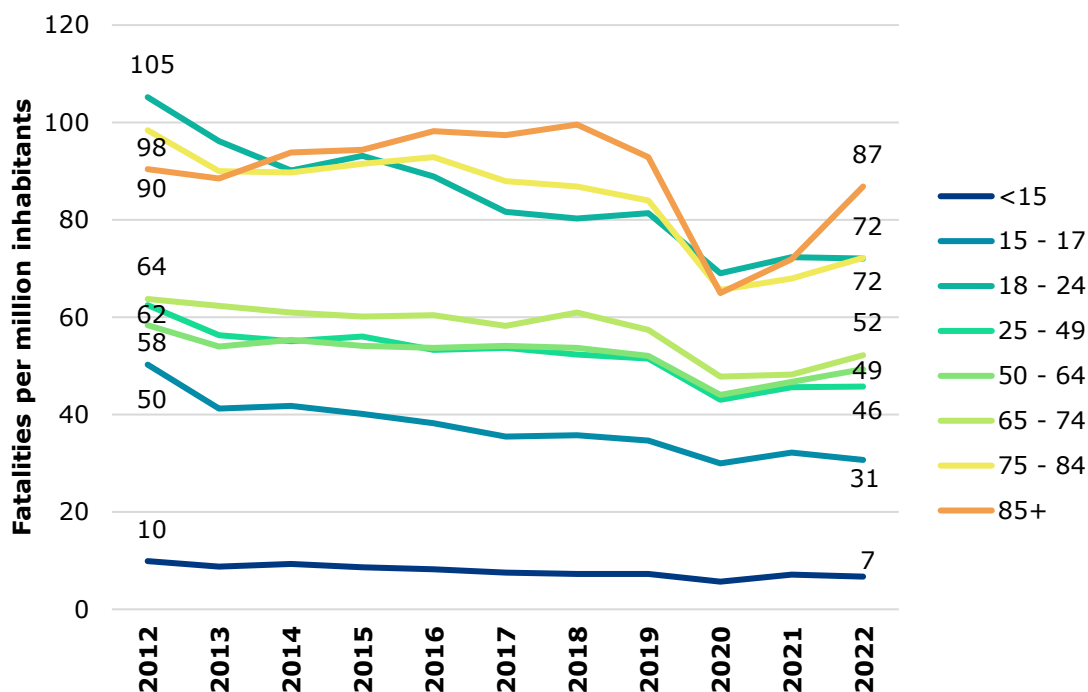


Table 3 presents the reduction in road fatalities by age groups. **The highest decrease in road fatalities since 2012 can be recorded for road users aged 15 to 17 years (-39%) and 18 to 24 years (-38%),** while a smaller reduction occurs in age groups 50+ and 65-74 years and an increase in numbers for the age group 85+ (+27%).

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

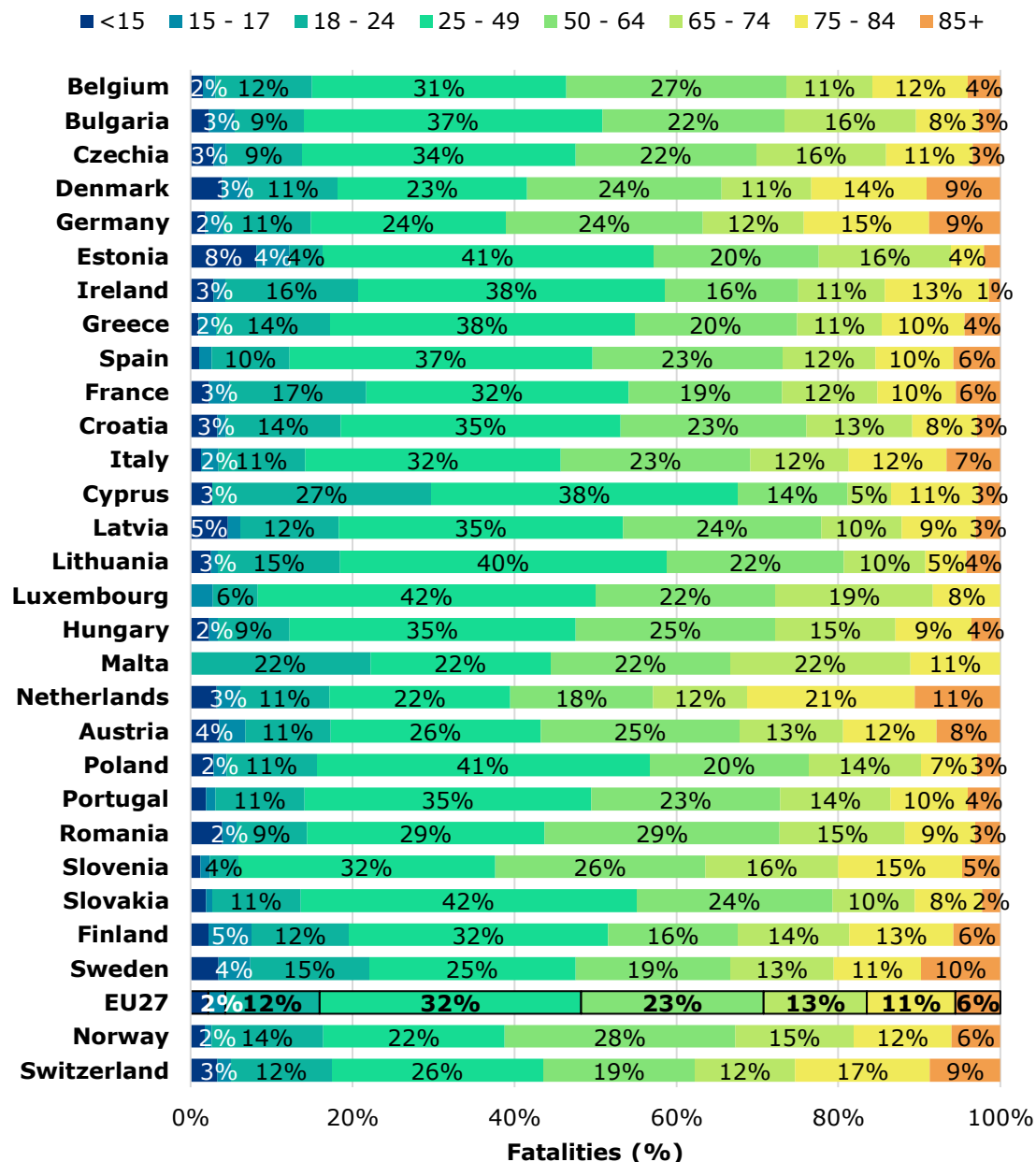
	2012	2019	2020	2021	2022	LT*	ST*
<15	672	489	384	482	450	-33%	-8%
15 - 17	703	476	412	445	429	-39%	-10%
18 - 24	3,850	2,733	2,313	2,414	2,388	-38%	-13%
25 - 49	9,704	7,650	6,346	6,666	6,620	-32%	-13%
50 - 64	5,096	4,815	4,096	4,364	4,620	-9%	-4%
65 - 74	2,629	2,710	2,303	2,384	2,612	-1%	-4%
75 - 84	2,780	2,577	2,028	2,090	2,242	-19%	-13%
85+	897	1,160	836	941	1,138	27%	-2%
Total	26,332	22,610	18,718	19,786	20,499	-22%	-9%

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

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

Figure 6 shows the distribution of road fatalities by age group in the EU27 and EFTA countries in 2022. There are clear differences between countries; **in the Netherlands**, for example, the **fatalities are older on average, with the over-75 age group accounting for 32%**.

Figure 6. Distribution of road fatalities by age groups per country in the EU27 and EFTA (2022). Source: CARE



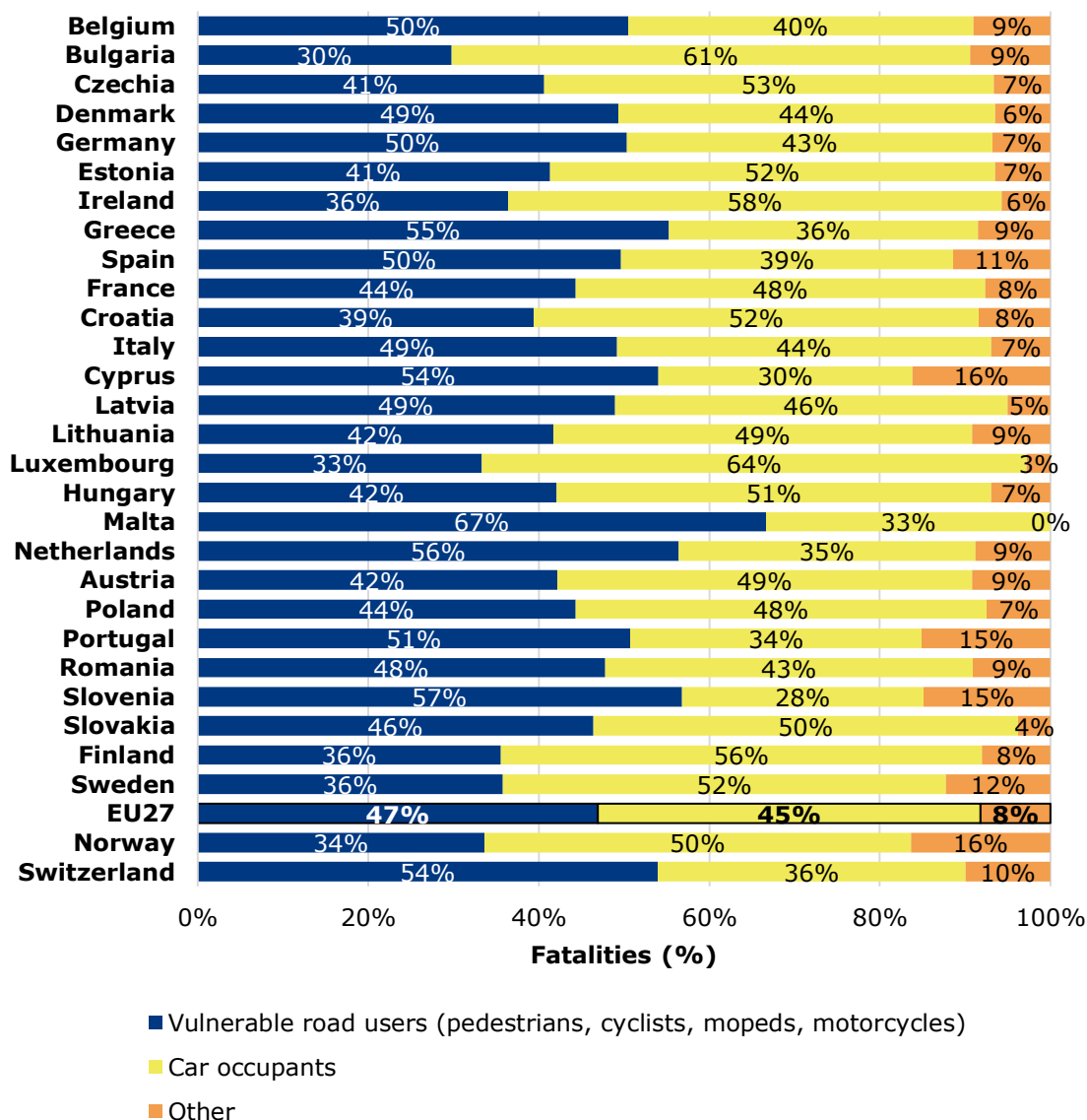
Notes:

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

4.3 Transport modes

Vulnerable road users (pedestrians, cyclists, moped riders and motorcyclists) make up for a large proportion of all road fatalities, with a share of 47% in the EU27 and EFTA countries in 2022. Another 45% are represented by car occupants. Those shares vary considerably between the Member States, with differences partly resulting from different modal splits and safety levels for different road user groups. Higher shares of vulnerable road users' (VRUs) fatalities are found in Slovenia, Netherlands and Greece (>55%).

Figure 7. Distribution of road fatalities by transport mode per country in the EU27 and EFTA (2022). Source: CARE

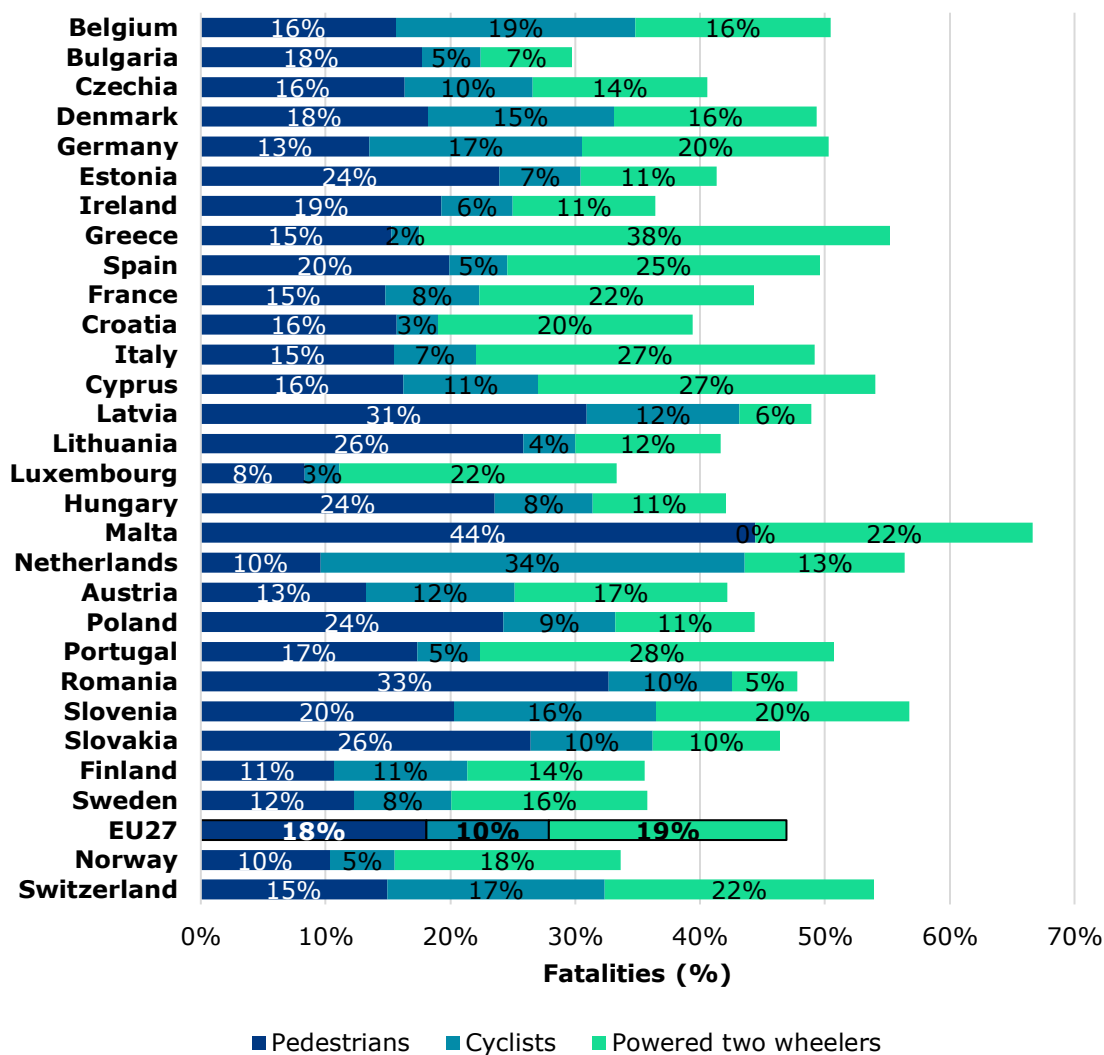


Notes:

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

Looking at the distribution of fatalities of VRUs in 2022, high shares (>30%) in pedestrian fatalities can be found in Romania and Latvia. The Netherlands records a high share in cyclist fatalities (28%), while Greece records a high share in powered two wheelers' fatalities (38%).

Figure 8. Distribution of fatalities of vulnerable road users per country in the EU27 and EFTA (2022). Source: CARE

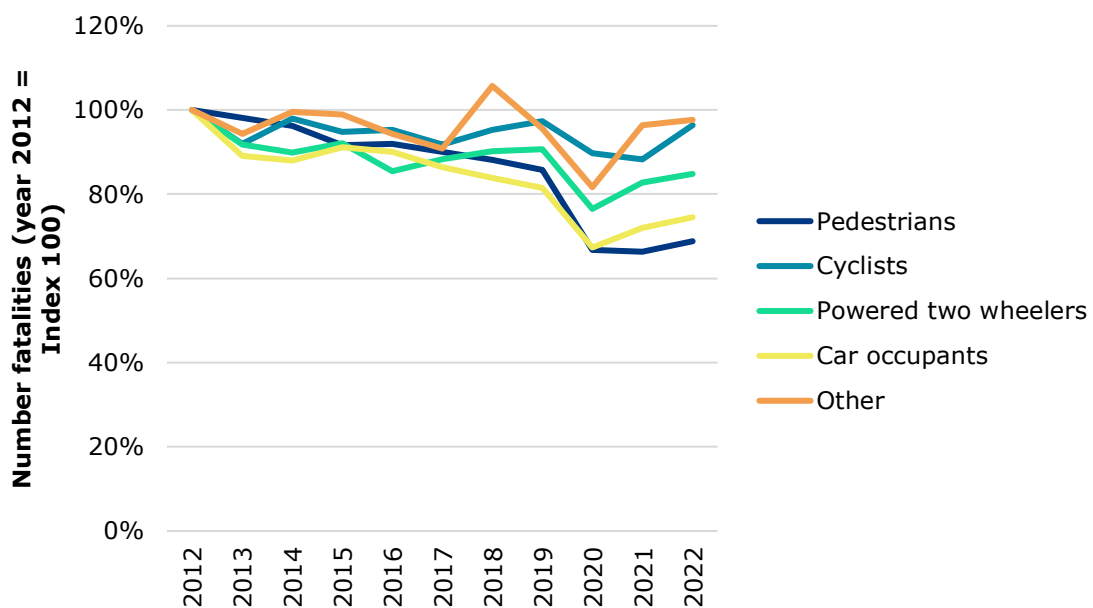


Notes:

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

Figure 9 shows that the number of fatalities for all groups of road users decreased overall between 2012 and 2022 in the EU Member States. **The fatality numbers for pedestrians and car occupants improved the most** with drops below 80% compared to the benchmark in 2012.

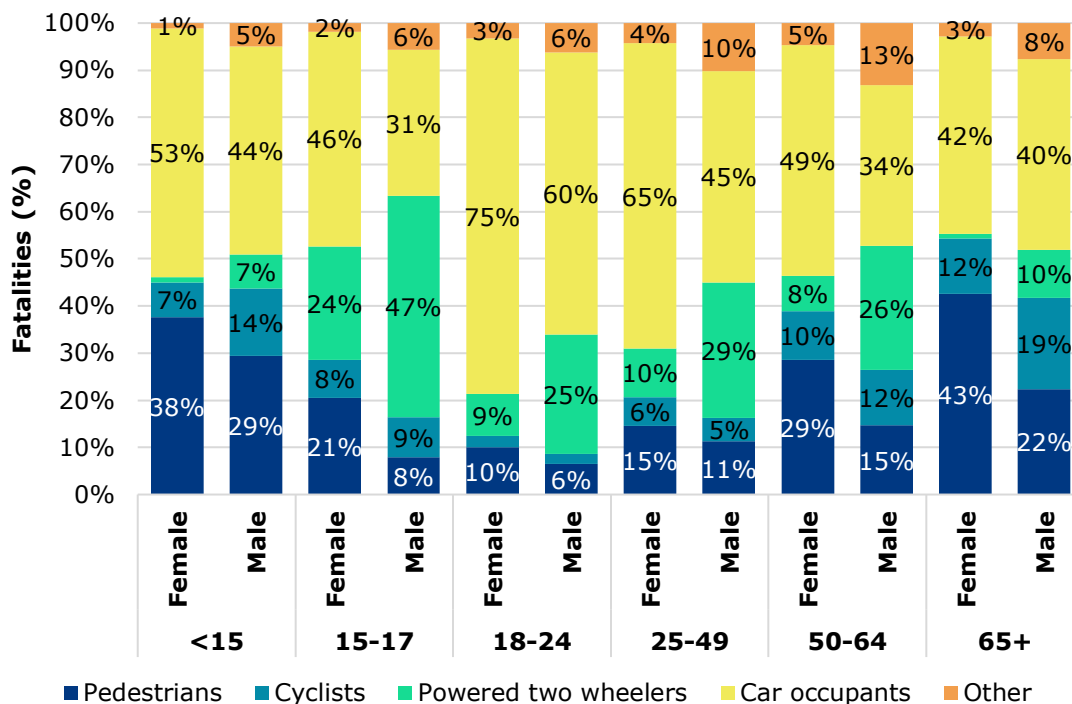
Figure 9. Trend of road fatalities by transport mode and road type in the EU27 (2012-2022). Source: CARE



4.4 Gender, Age and Transport modes

Figure 10 compares the distribution of fatalities by transport mode in six age groups and by gender in the EU27 in 2022. Among **females between 18 and 24, the share of car occupant fatalities is notable with 75%**, although this share is also high for males of the same age (60%). **Male teenagers, aged 15 to 17, most frequently die on powered two wheelers (47%)** compared to other modes of transport.

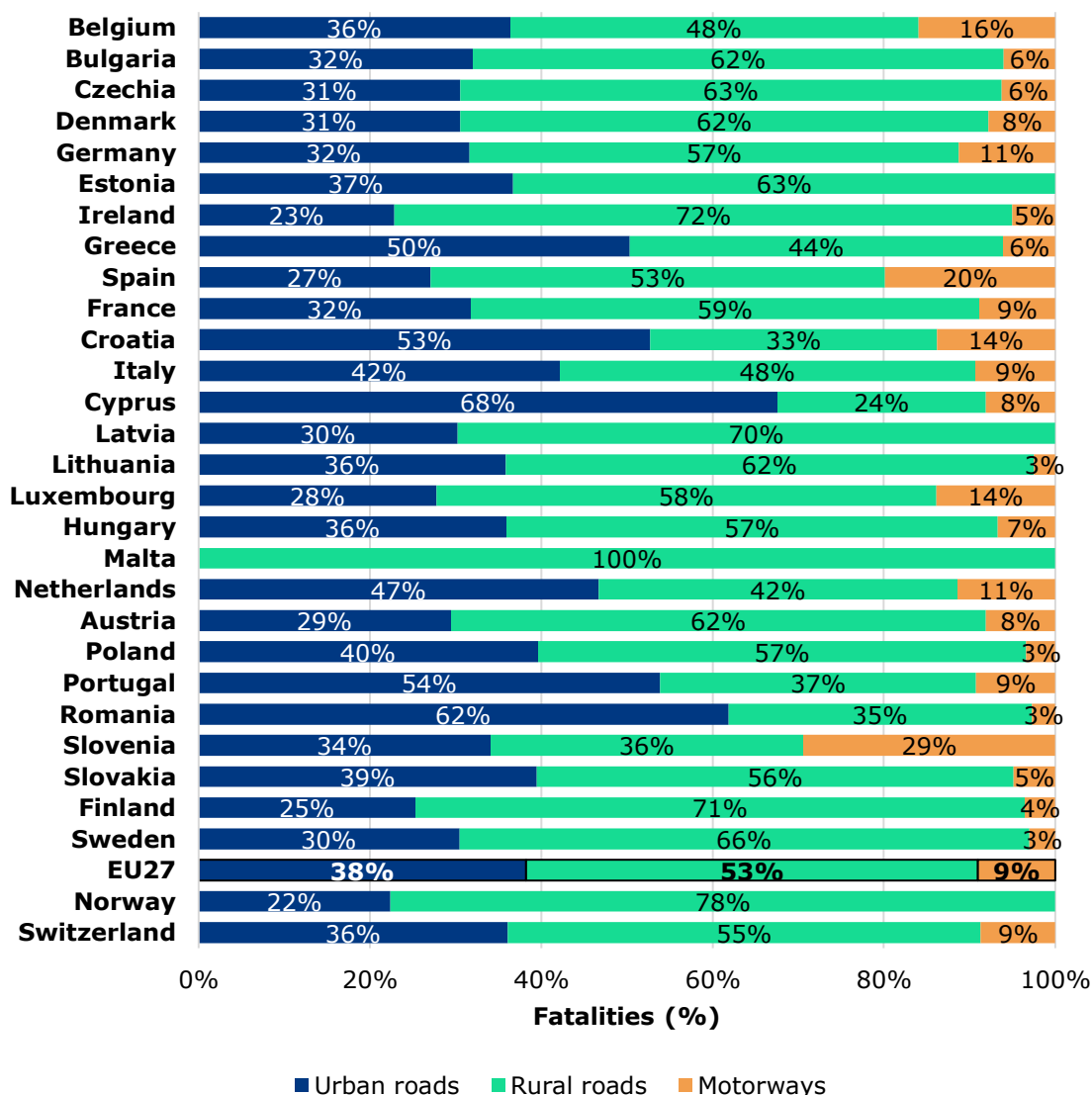
Figure 10. Distribution of road fatalities by age, gender and transport mode in the EU27 (2022). Source: CARE



5. Location

Figure 11 shows the distribution of fatalities by type of road. Overall, only **9% of road fatalities in the EU in 2022 occurred in crashes on motorways**, and **53% of road fatalities took place on rural roads** and **38% on urban roads**. In some countries, however, the share of fatalities occurring on urban roads exceeds the one on rural roads. This can be observed in Cyprus, Romania, Greece, Croatia, Netherlands and Portugal.

Figure 11. Distribution of road fatalities by road type per country in the EU27 and EFTA (2022). Source: CARE



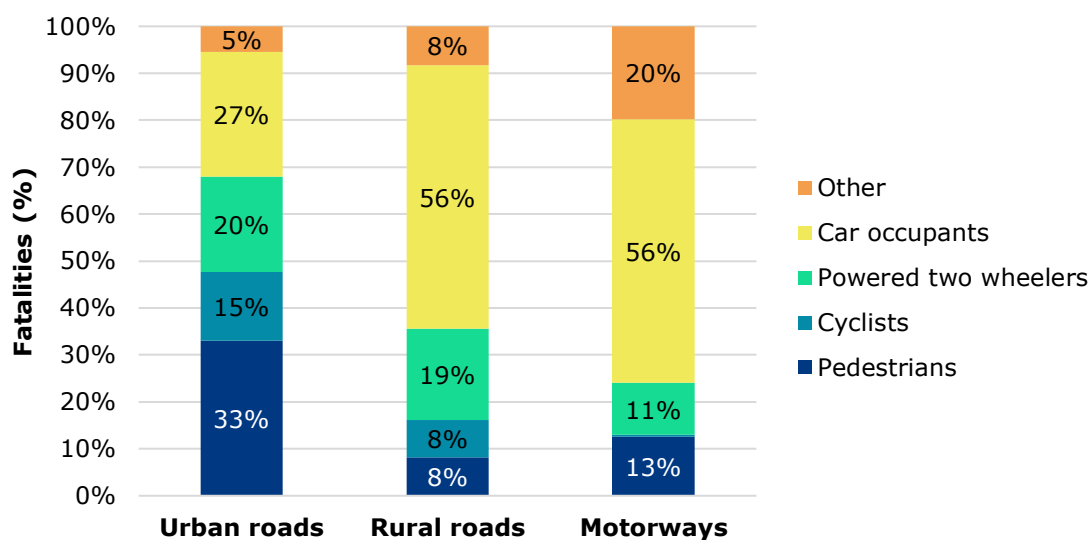
Notes:

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

On **motorways**, where cars are the dominant mode of transport, almost **60% of all fatalities were car occupants**. Motorcyclists account for 11% of fatalities on motorways.

On **urban roads**, where all modes of transport are represented, **the share of killed pedestrians is highest with 33%**. Together with **cyclists (15%) and powered two wheelers (20%)**, the **VRUs make up for almost 70% of the fatalities on urban roads**. The relatively high share of pedestrians killed on motorways (13%) results from including vehicle occupants who have left their vehicles on the motorway in this group.

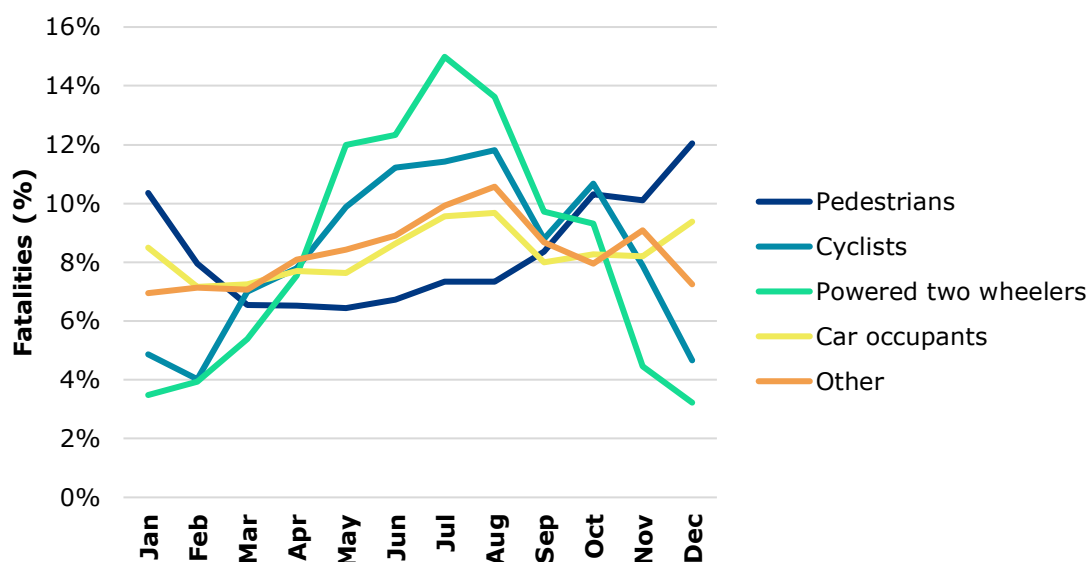
Figure 12. Distribution of road fatalities by transport mode and road in the EU27 (2022). Source: CARE



6. Seasonality

Figure 13 illustrates the distribution of fatalities by month and road user group, which shows that certain modes have a seasonal effect in the occurrence of fatalities over the course of one year. **Pedestrian fatalities peak in December and January, therefore indicating higher occurrences during winter months. Meanwhile the peak for powered two wheelers is especially pronounced in the summer months (June, July and August).** In general, the higher shares of fatalities occur during the second half of the year.

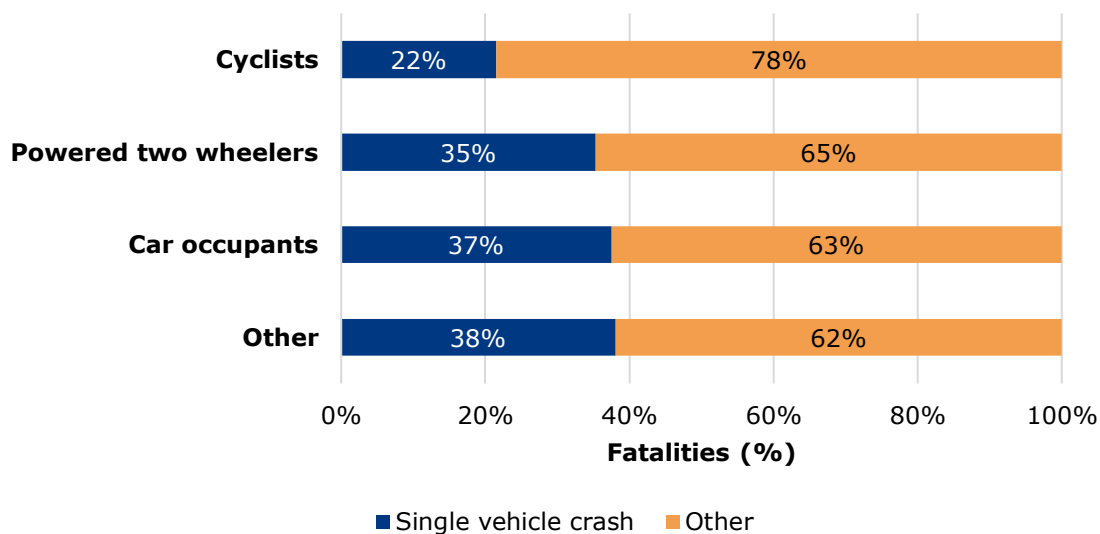
Figure 13. Monthly distribution of road fatalities by transport mode in the EU27 (2022). Source: CARE



7. Type of collision

Car occupant fatalities (37%) occurred more frequently in single vehicle crashes with no crash opponent than fatalities of cyclists and powered two wheelers. However, the share of single vehicle crashes among fatal powered two wheelers crashes is also about a third (35%) and almost a fifth for cyclists (22%).

Figure 14. Distribution of road fatalities by type of collision and transport mode in the EU27 (2022). Source: CARE



8. Notes

8.1 Definitions

The definitions below are taken from the CADAS Glossary as well as 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.

Car / passenger car

Motor vehicle with 3 or 4 wheels, mainly used to transport people, seating for no more than 8 occupants. Motor vehicles with these characteristics used as taxis as well as motor caravans are also included.

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.

Victims

Total of fatalities, seriously injured, 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 January 2024.

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

