European Commission

Facts & Figures

Buses & Heavy Goods Vehicles

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 fatalities of buses/coaches and heavy goods vehicles (HGVs) on European roads. Buses/coaches are motor vehicles intended by virtue of their construction and equipment to transport more than 9 people, including the driver. HGVs are motor vehicles designed and constructed primarily for the carriage of goods with a maximum allowed mass (MAM) or gross combination mass (GCM) of over 3.5 tonnes. 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

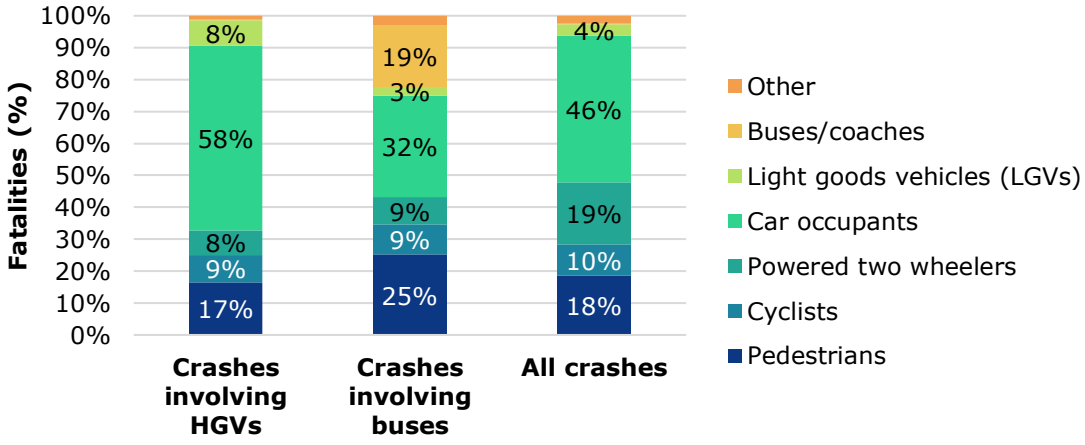
in crashes involving heavy goods vehicles

2,940 fatalities
(14% of all fatalities)

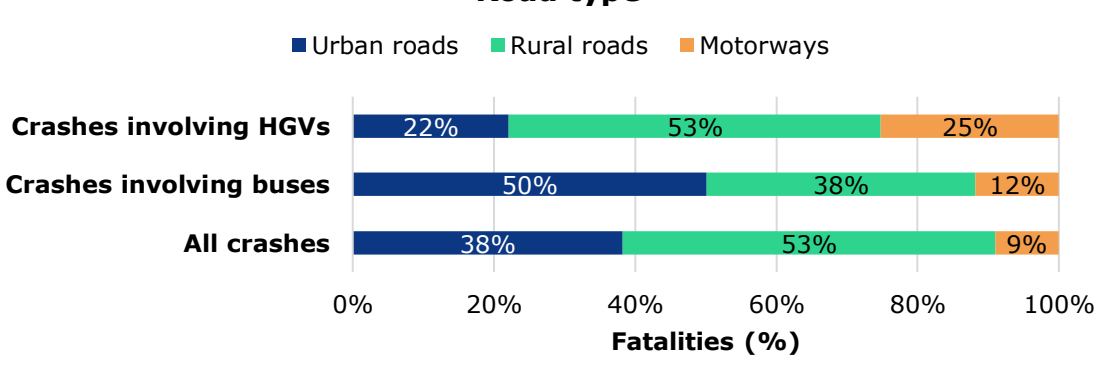
in crashes involving buses/coaches

413 fatalities
(2% of all fatalities)

Transport modes



Road type



2. Summary

In 2022, 14% of all road fatalities in the EU27 occurred in crashes involving HGVs and 2% of road fatalities in the EU27 occurred in crashes involving buses/coaches. There was a decline in fatal crashes involving HGVs and buses/coaches in the EU in the period between 2012-2022, although the respective share remained stable.

Countries differ in terms of **fatalities per million inhabitants killed in HGV crashes**, i.e., between about 18.9 and 2.6 fatalities in HGV crashes per million inhabitants. **The most fatalities in 2022 were recorded in Germany (475), France (407) and Poland (375) and** the **fewest in Luxembourg (5), Slovenia (12) and Estonia (13).** In terms of fatalities per million inhabitants killed in bus/coach crashes, the share ranges between about 4.9 fatalities in Croatia and 0.3 fatalities in Sweden in crashes per million inhabitants.

In addition, the following characteristics can be summarised for road fatalities related to HGV and bus/coach crashes:

- The gender distribution in HGV crashes is very similar to the distribution in all crashes, whereas the **female share in fatalities in crashes involving buses/coaches (32%)** is remarkably higher than the respective share in crashes involving HGVs and all crashes (23%).
- The **age distribution of fatalities in HGV crashes** differs from the respective distribution in crashes involving buses/coaches and all crashes with a higher share of **25–64-year-old fatalities** (62%) and a fewer share of **under 24 years old** (13%).
- Both **fatal HGV and bus/coach crashes** predominantly occur during **daytime and working days.**
- **Compared to all fatalities, fatalities in crashes involving buses/coaches mainly occur on urban roads** (50% compared to 38% in all crashes and 22% in crashes involving HGVs). Crashes involving **HGVs occur more frequently on motorways (25%)** compared to **all crashes (9%).**

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 a large set of additional 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 in crashes involving HGVs 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	115	107	133	111	112	107	111	110	84	97	93	-19%	-16%
Bulgaria	93	109	91	121	121	121	121	121	87	98	129	39%	7%
Czechia	139	124	138	145	136	127	125	122	143	111	130	-7%	7%
Denmark	29	32	24	17	47	36	33	33	27	27	32	10%	-3%
Germany	-	-	601	604	620	626	602	528	482	491	475	-	-10%
Estonia	7	7	4	2	13	12	20	20	15	16	13	-	-35%
Ireland	11	22	17	16	28	40	40	43	-	-	-	-	-
Greece	58	74	73	69	79	51	72	48	44	38	-	-35%	-21%
Spain	245	217	262	262	284	321	283	236	199	230	261	7%	11%
France	485	463	480	473	493	418	444	390	304	392	407	-16%	4%
Croatia	29	41	39	38	39		25	35	33	42	31	7%	-11%
Italy	280	267	272	252	403	377	348	351	178	300	360	29%	3%
Cyprus	1	3	-	-	3	1	2	3	2	4	3	-	-
Latvia	36	37	38	38	29	28	40	25	31	-	-	-	-
Lithuania	-	42	33	45	24	35	25	31	43	36	19	-	-39%
Luxembourg	3	8	5	6	4	4	2	2	6	4	5	-	-
Hungary	118	106	112	109	93	100	117	111	88	97	85	-28%	-23%
Malta	-	-	-	1	1	2	-	2	1	-	-	-	-
Netherlands	73	83	72	73	76	70	87	74	63	49	70	-4%	-5%
Austria	77	50	51	66	74	52	56	51	51	52	64	-17%	26%
Poland	-	-	-	-	-	-	497	524	403	451	375	-	-28%
Portugal	77	80	78	68	59	74	75	58	57	50	64	-17%	10%
Romania	169	139	147	146	96	86	73	89	55	80	59	-65%	-34%
Slovenia	3	7	23	25	31	21	31	13	12	20	12	-	-8%
Slovakia	-	-	-	-	39	55	38	40	28	41	42	-	5%
Finland	98	70	59	64	73	74	66	67	55	71	-	-28%	6%
Sweden	41	30	55	40	46	34	68	51	27	-	-	-	-
EU	3,367	3,256	3,344	3,327	3,520	3,401	3,401	3,178	2,561	2,899	2,940	-13%	-8%
Iceland	1	1	4	2	2	2	3	-	1	2	1	-	-
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-
Norway	35	48	33	28	36	29	26	31	21	30	22	-37%	-29%
Switzerland	35	31	25	34	27	30	22	24	17	22	26	-26%	8%

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

Table 2. Fatalities in crashes involving buses/coaches per country in the EU27 and EFTA (2012-2022). Source: CARE

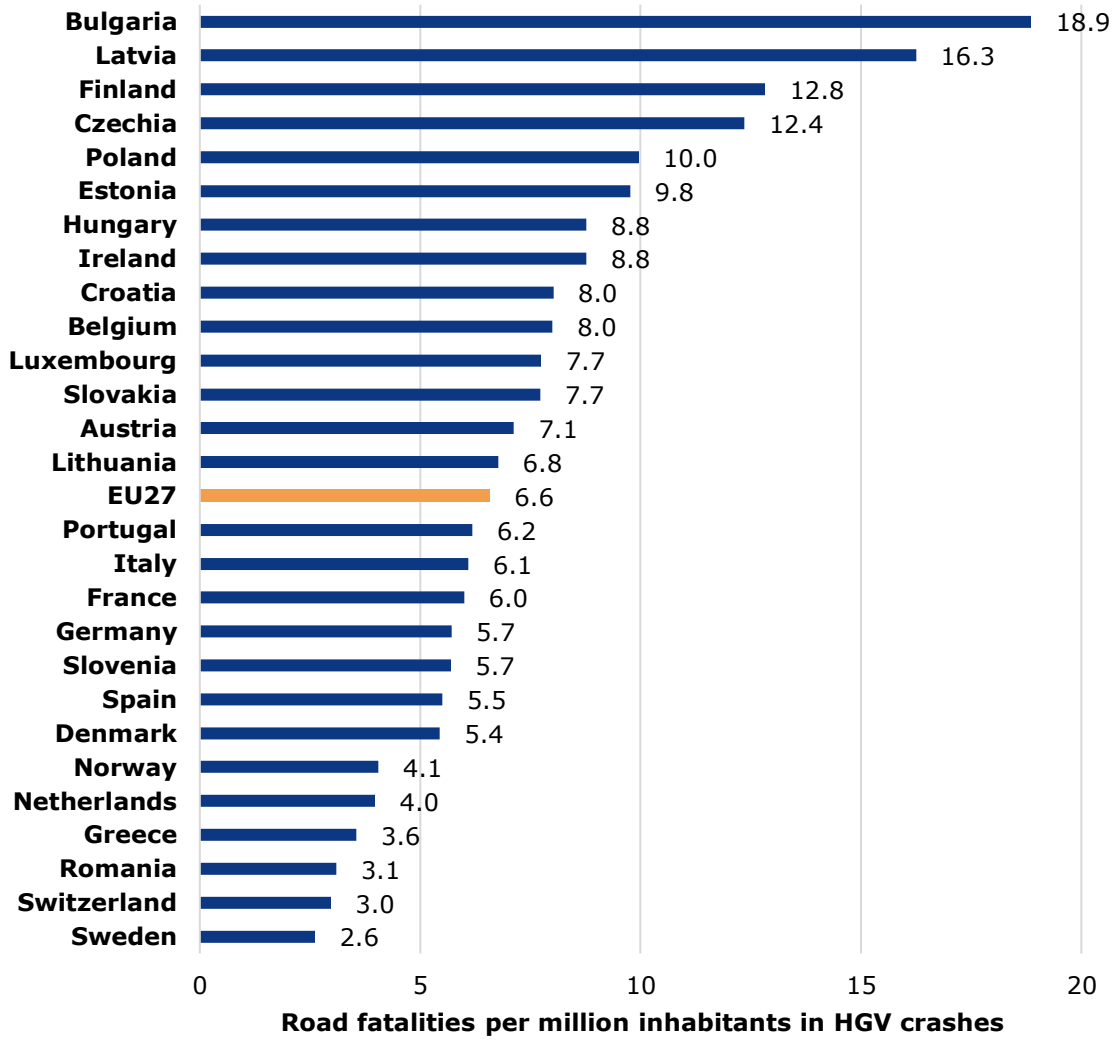
Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	LT*	ST*
Belgium	20	23	14	15	11	11	15	13	10	9	15	-25%	15%
Bulgaria	18	22	15	20	31	34	44	28	23	58	19	6%	-32%
Czechia	21	21	18	19	17	19	24	10	14	13	9	-57%	-
Denmark	11	3	9	2	12	9	3	4	3	1	5	-55%	-
Germany	-	-	73	60	42	65	56	44	61	39	47	-	7%
Estonia	21	18	18	15	8	-	2	3	1	2	4	-81%	-
Ireland	10	7	3	5	-	4	2	3	-	-	-	-	-
Greece	23	22	18	18	12	13	10	16	6	10	-	-57%	-38%
Spain	40	37	54	31	64	44	56	34	18	35	49	22%	44%
France	61	45	57	88	66	52	43	58	33	32	45	-26%	-22%
Croatia	16	12	6	13	10		12	6	4	13	19	19%	
Italy	79	88	60	48	57	60	58	46	34	35	50	-37%	9%
Cyprus	1	-	-	1	3	3	1	-	2	-	2	-	-
Latvia	15	6	11	7	7	2	6	4	4	-	-	-	-
Lithuania	-	7	7	5	7	8	5	8	1	4	1	-	-
Luxembourg	1	2	1	-	-	-	7	-	-	1	1	-	-
Hungary	26	26	40	29	26	43	30	23	12	40	16	-39%	-30%
Malta	-	-	-	2	-	1	3	-	1	-	-	-	-
Netherlands	7	10	13	9	13	5	13	5	7	8	12	-	-
Austria	12	8	9	6	8	11	8	6	8	2	5	-58%	-
Poland	-	-	-	-	-	-	81	67	44	39	42	-	-37%
Portugal	18	16	14	13	14	8	10	38	8	6	10	-44%	-74%
Romania	73	48	61	86	63	65	72	68	33	30	27	-63%	-60%
Slovenia	2	4	2	2	1	1	3	5	-	2	2	-	-
Slovakia	-	-	-	-	10	16	10	21	9	8	7	-	-67%
Finland	13	9	10	9	7	10	8	1	2	5	-	-62%	-
Sweden	18	11	12	4	7	10	5	10	3	-	-	-	-
EU	698	627	626	597	571	580	587	521	344	403	413	-41%	-21%
Iceland	1	1	-	-	1	2	1	-	-	1	1	-	-
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	-	-
Norway	10	9	12	3	4	6	4	6	7	1	4	-	-
Switzerland	39	4	6	12	4	5	9	5	7	1	6	-85%	-

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

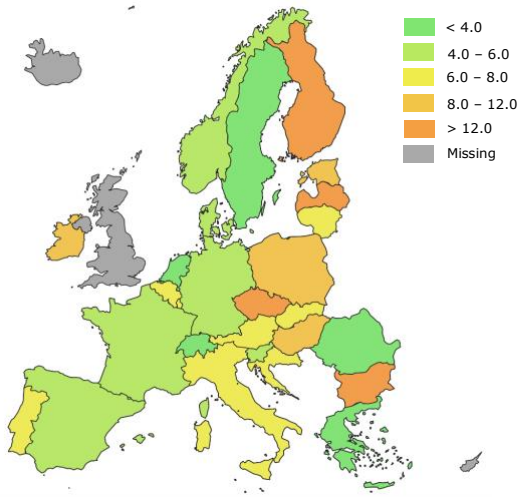
3.2 Mortality rate: number of road fatalities per million inhabitants

Bulgaria and Latvia have the highest rate of fatalities in crashes involving HGVs per million inhabitants, with about six times higher fatality numbers per million inhabitants compared to the countries with the **lowest numbers**, **Sweden and Switzerland**. Moreover, 10 of the 14 countries above the EU27 average are Central European countries.

Figure 1. Fatalities per million inhabitants in crashes involving HGV per country in the EU27 and EFTA (2022). Source: CARE, EUROSTAT

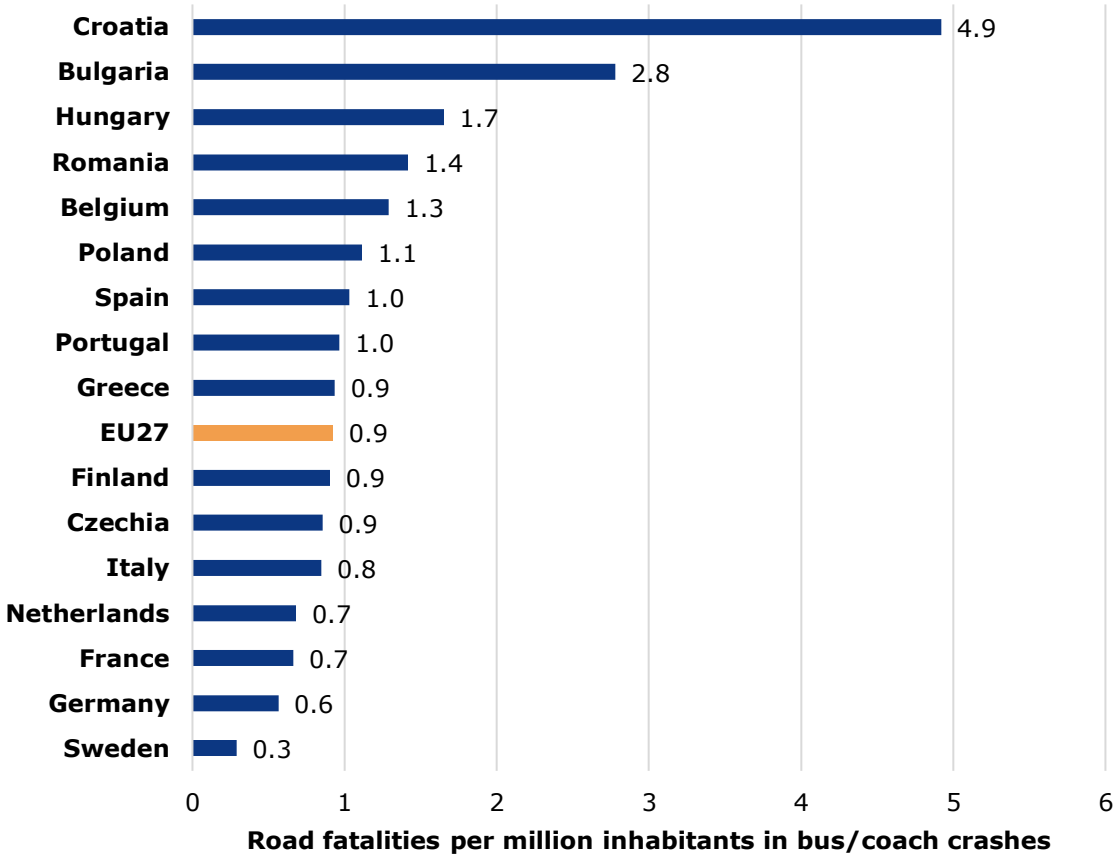


Notes:
- Cyprus, Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- For Ireland, Greece, Latvia, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.

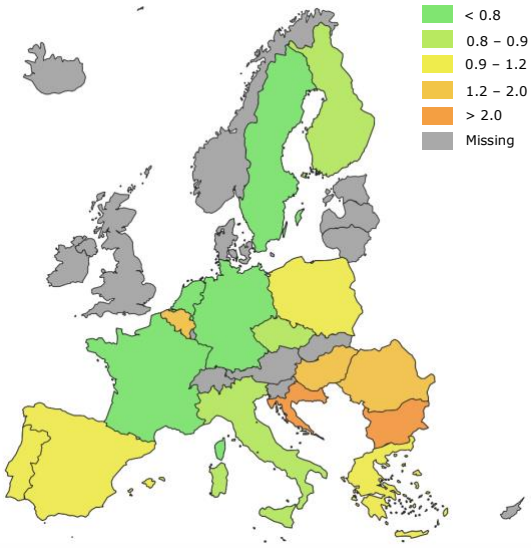


Croatia and **Bulgaria have the highest rate** of fatalities in crashes involving buses/coaches per million inhabitants. Eight out of 16 countries have a fatality rate in bus/coach crashes per million inhabitants below 1.0 (e.g. Sweden, Germany and France).

Figure 2. Fatalities per million inhabitants in crashes involving bus/coach per country in the EU27 and EFTA (2022). Source: CARE, EUROSTAT



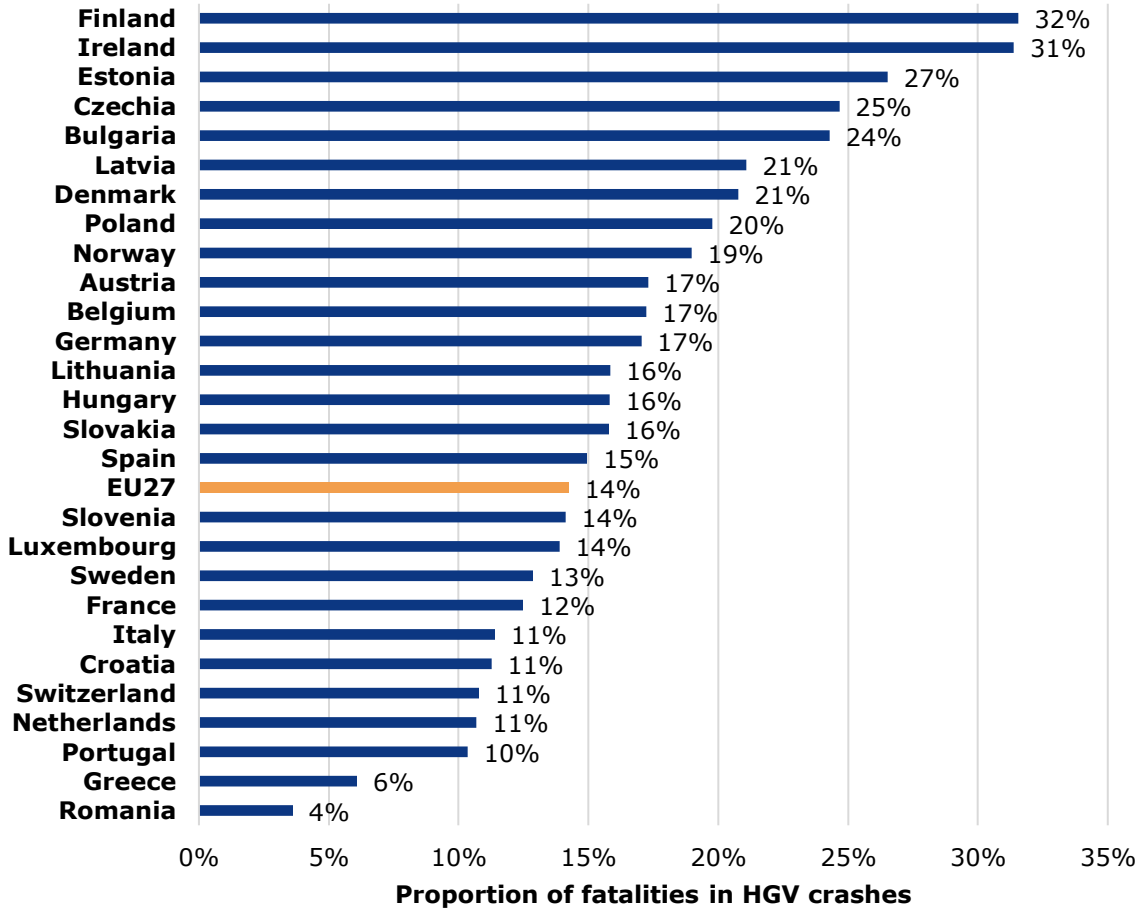
Notes:
- Denmark, Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Austria, Slovenia, Slovakia, Iceland, Liechtenstein, Norway and Switzerland are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- For Greece, Finland and Sweden the missing value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



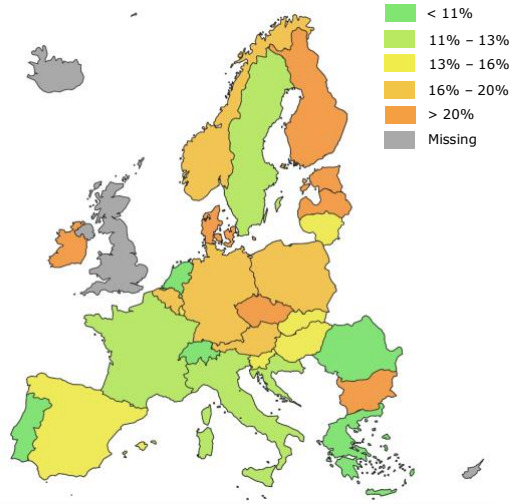
3.3 Share of fatalities in HGV crashes and bus/coach crashes in the total number of road fatalities

As for fatalities per million inhabitants, the share of HGV-related crashes in the total number of road fatalities also varies between the countries in Europe. With a share of fatalities in HGV crashes in the total number of fatalities of about 30%, **the share is highest in Finland and Ireland,** while **Romania and Greece have the lowest share** (both below 10%). **On average, one out of seven fatalities on European roads is related to an HGV crash.**

Figure 3. Share of fatalities in crashes involving HGV in the total number of fatalities, per country in the EU27 and EFTA (2022). Source: CARE

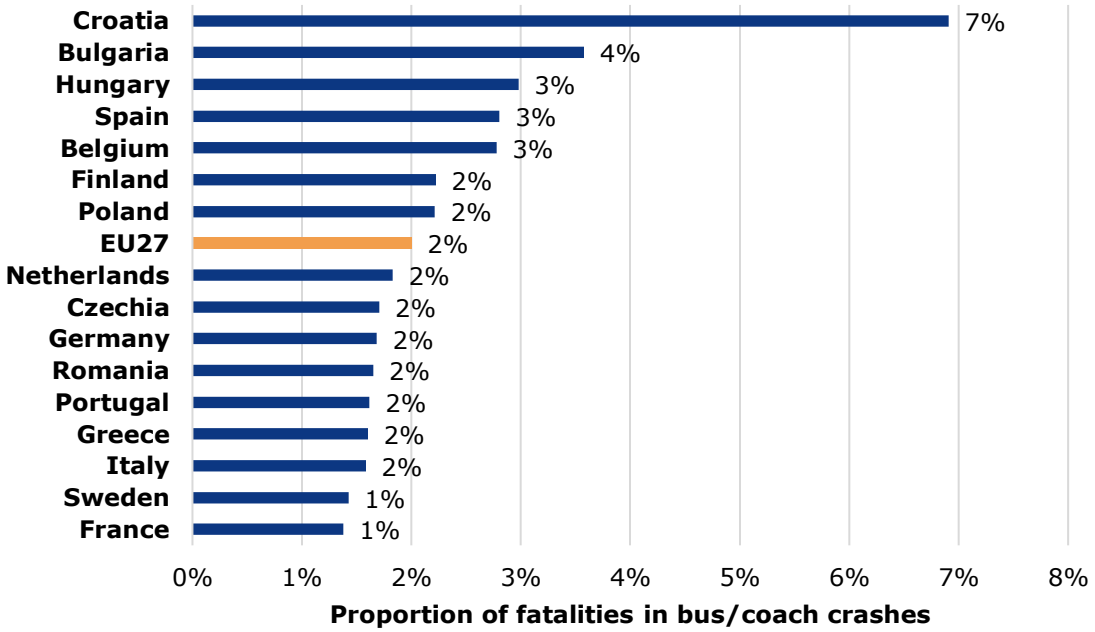


Notes:
- Cyprus, Malta, Iceland and Liechtenstein are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- For Ireland, Greece, Latvia, Finland and Sweden the missing value for 2022 was imputed with the last known value in the series.

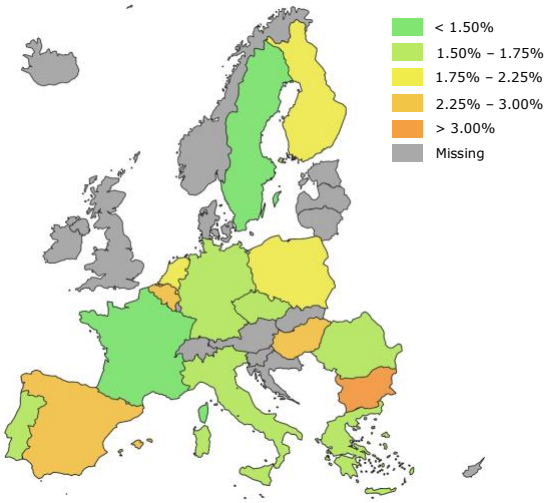


In most countries, fatalities in bus/coach crashes make up 1% to 3% of the total crash records, while the share is **4% in Bulgaria and 7% in Croatia.**

Figure 4. Share of fatalities in crashes involving bus/coach in the total number of fatalities, per country in the EU27 and EFTA (2022). Source: CARE



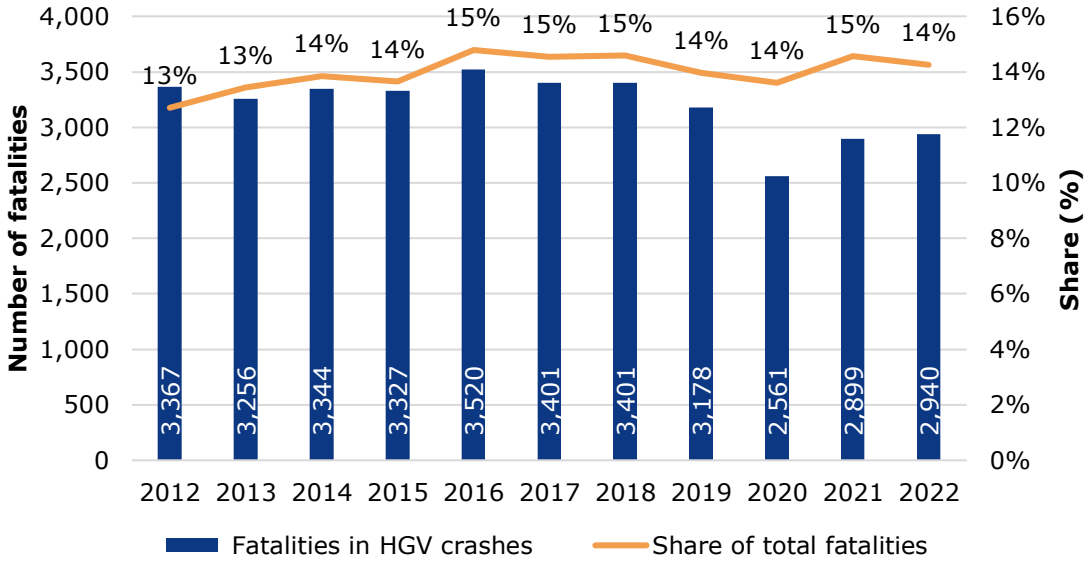
Notes:
- Denmark, Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Austria, Slovenia, Slovakia, Iceland, Liechtenstein, Norway and Switzerland are not included in the figure because there are fewer than 10 fatalities in the year 2022.
- For Greece, Finland and Sweden the missing value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



3.4 Trend in the number of fatalities

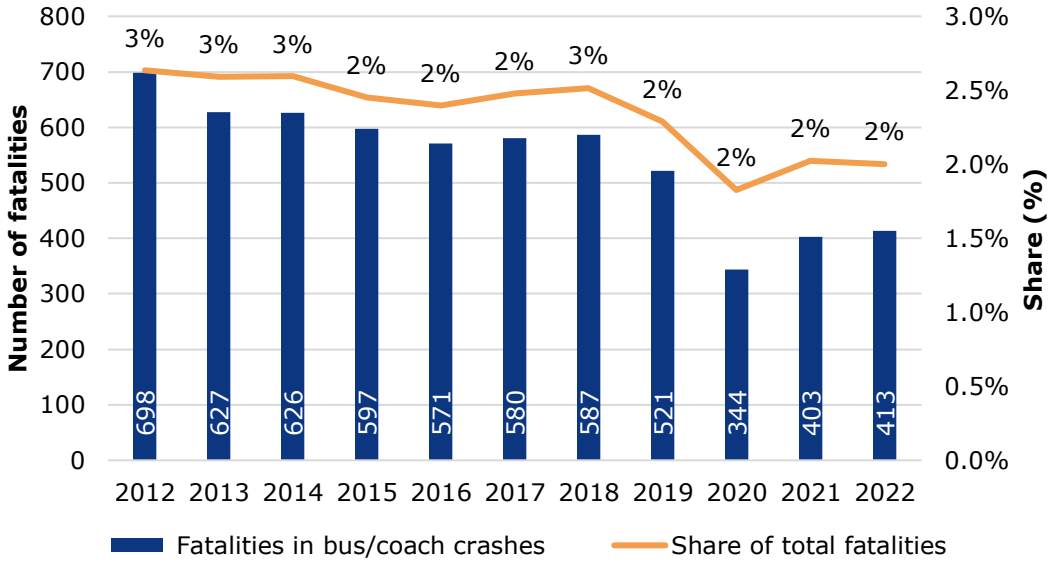
In 2022, 14% of all road fatalities in the EU27 occurred in crashes involving HGVs. On average, one in seven fatalities in Europe is related to HGV crashes. **About 2,940 people lost their lives in crashes involving HGVs in the EU27 in 2022, while the number of fatalities in crashes involving HGVs in 2012 was 3,367.** As a result, there seems to be a slight downward trend in the number of fatalities in crashes involving HGVs over the years accompanied by a slight increase in the share of fatalities in all accidents from 13% to 14%.

Figure 5. Annual number of fatalities in crashes involving HGVs and their share in the total number of fatalities in the EU27 (2012-2022). Source: CARE



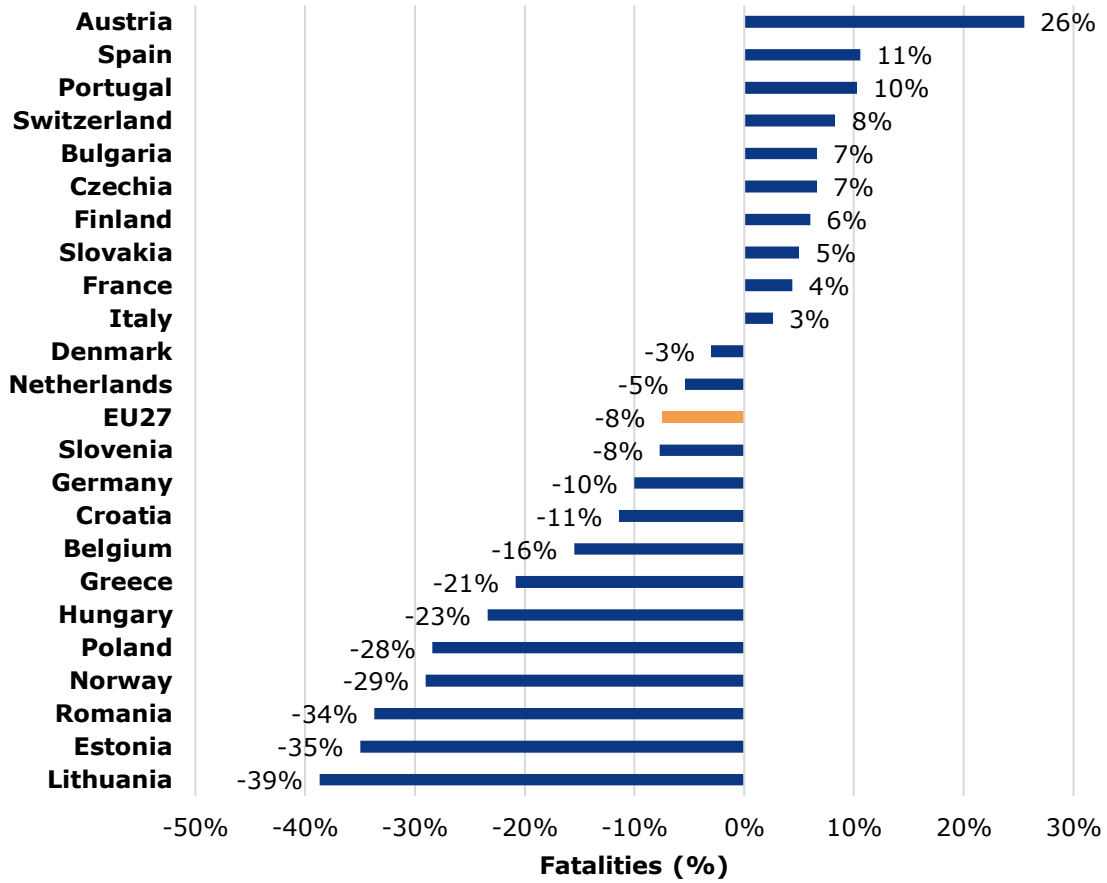
Although individual bus/coach crashes typically involve many victims, the annual development is not as volatile as it would be expected: In 2022, **bus/coach crashes had a share of about 2% in total fatalities in the EU27 –** this proportion remained consistent between 2012 and 2022, although a slight decline is noticeable.

Figure 6. Annual number of fatalities in crashes involving buses/coaches and their share in the total number of fatalities in the EU27 (2012-2022). Source: CARE



Looking at the short-term changes (2019 compared to 2022), the **highest reduction** with more than 30% decrease in fatalities with HGVs involvement is **observable for Lithuania (-39%), Estonia (-35%) and Romania (-34%)**. Meanwhile the number of fatalities with HGVs involved **increased sharply in Austria (+26%) between 2019 and 2022**.

Figure 7. Percentage short term changes in the number of fatalities in crashes involving HGV per country in the EU27 and EFTA (2019-2022). Source: CARE



Notes:
- Cyprus, 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 provides more details in terms of the development of fatalities in crashes involving HGVs.

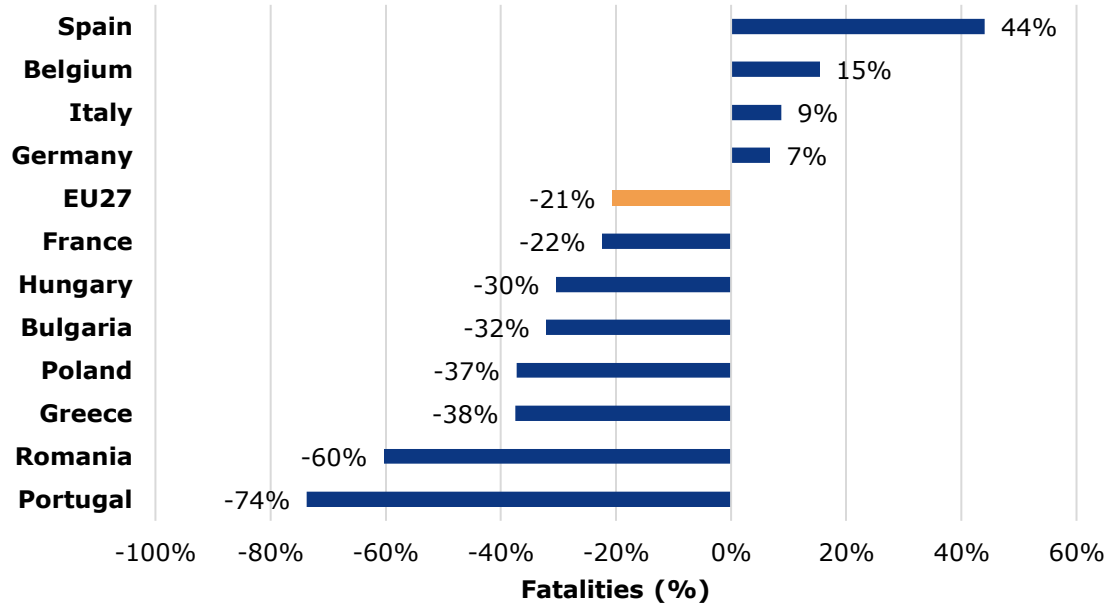
Table 3. Number and trend of fatalities in crashes involving HGVs per country in the EU27 and EFTA (2012-2022). Source: CARE

	2012	2019	2020	2021	2022	ST*	Miniplot: trend since 2012
Belgium	115	110	84	97	93	-19%	
Bulgaria	93	121	87	98	129	39%	
Czechia	139	122	143	111	130	-7%	
Denmark	29	33	27	27	32	10%	
Germany	-	528	482	491	475	-	
Estonia	7	20	15	16	13	-	
Ireland	11	43	-	-	-	-	
Greece	58	48	44	38	-	-35%	
Spain	245	236	199	230	261	7%	
France	485	390	304	392	407	-16%	
Croatia	29	35	33	42	31	7%	
Italy	280	351	178	300	360	29%	
Latvia	36	25	31	-	-	-	
Lithuania	-	31	43	36	19	-	
Luxembourg	3	2	6	4	5	-	
Hungary	118	111	88	97	85	-28%	
Netherlands	73	74	63	49	70	-4%	
Austria	77	51	51	52	64	-17%	
Poland	-	524	403	451	375	-	
Portugal	77	58	57	50	64	-17%	
Romania	169	89	55	80	59	-65%	
Slovenia	3	13	12	20	12	-	
Slovakia	-	40	28	41	42	-	
Finland	98	67	55	71	-	-28%	
Sweden	41	51	27	-	-	-	
EU27	3,367	3,178	2,561	2,899	2,940	-13%	
Norway	35	31	21	30	22	-37%	
Switzerland	35	24	17	22	26	-26%	

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

While there was a reduction in the number of fatalities in bus/coach crashes in most countries between 2019 and 2022, with the **highest reductions in Portugal (-74%) and Romania (-60%)**, there has been a sharp increase in fatalities in Spain (+44%) during the same time period.

Figure 8. Share of short-term changes in the number of fatalities in crashes involving buses/coaches per country in the EU27 and EFTA (2019-2022). Source: CARE



Notes:
- Denmark, Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Austria 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 years 2021 and 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 provides more details on the development of crashes involving buses/coaches comparing the years 2019 and 2022.

Table 4. Number and trend of fatalities in crashes involving bus/coach per country in the EU27 and EFTA (2012-2022). Source: CARE

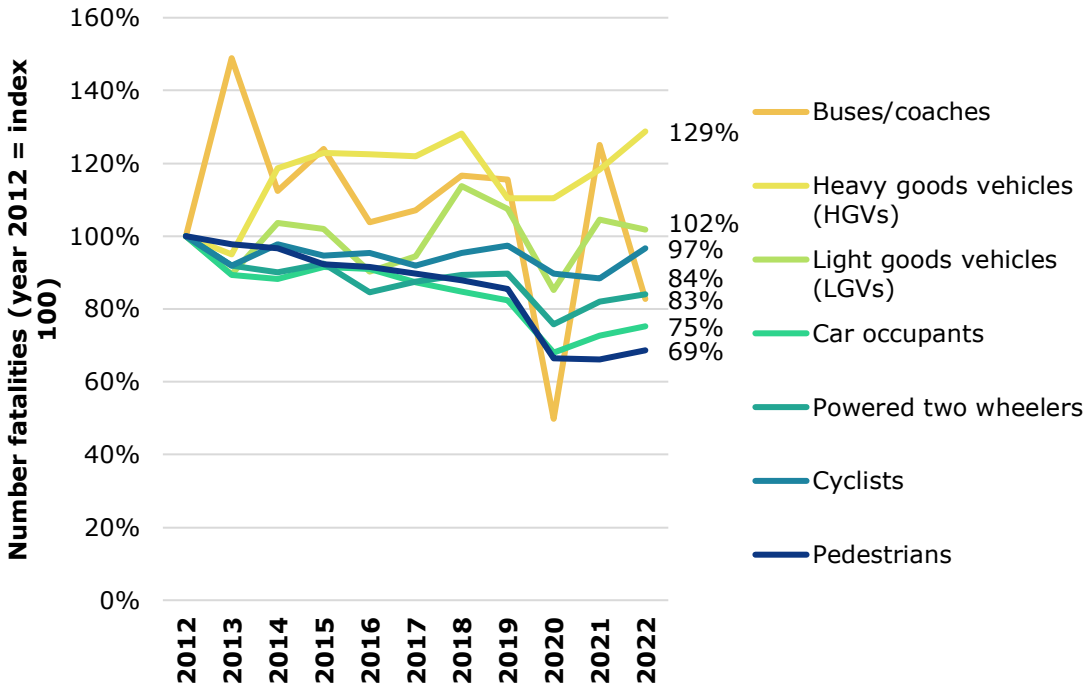
	2012	2019	2020	2021	2022	ST*	Miniplot: trend since 2012
Belgium	20	13	10	9	15	15%	
Bulgaria	18	28	23	58	19	-32%	
Czechia	21	10	14	13	9	15%	
Germany	-	44	61	39	47	7%	
Greece	23	16	6	10	-	-38%	
Spain	40	34	18	35	49	44%	
France	61	58	33	32	45	-22%	
Croatia	16	6	4	13	19	-	
Italy	79	46	34	35	50	9%	
Hungary	26	23	12	40	16	-30%	
Netherlands	7	5	7	8	12	-	
Poland	-	67	44	39	42	-37%	
Portugal	18	38	8	6	10	-74%	
Romania	73	68	33	30	27	-60%	
Finland	13	1	2	5	-	-	
Sweden	18	10	3	-	-	-	
EU27	698	521	344	403	413	-21%	

Notes:
- Denmark, Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Austria, Slovenia, Slovakia, Iceland, Liechtenstein, Norway and Switzerland are not included in the figure because there are fewer than 10 fatalities in the year 2022.

3.5 Comparison with other transport modes

The figure below shows the number of road crash fatalities involving various modes of transport over the period 2012-2022.
The number of HGV occupant fatalities has slightly increased (+29%) in the period 2012-2022. **The number of bus/coach occupant fatalities fluctuates throughout the years** and appears to be dominated by a small number of severe incidents.

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

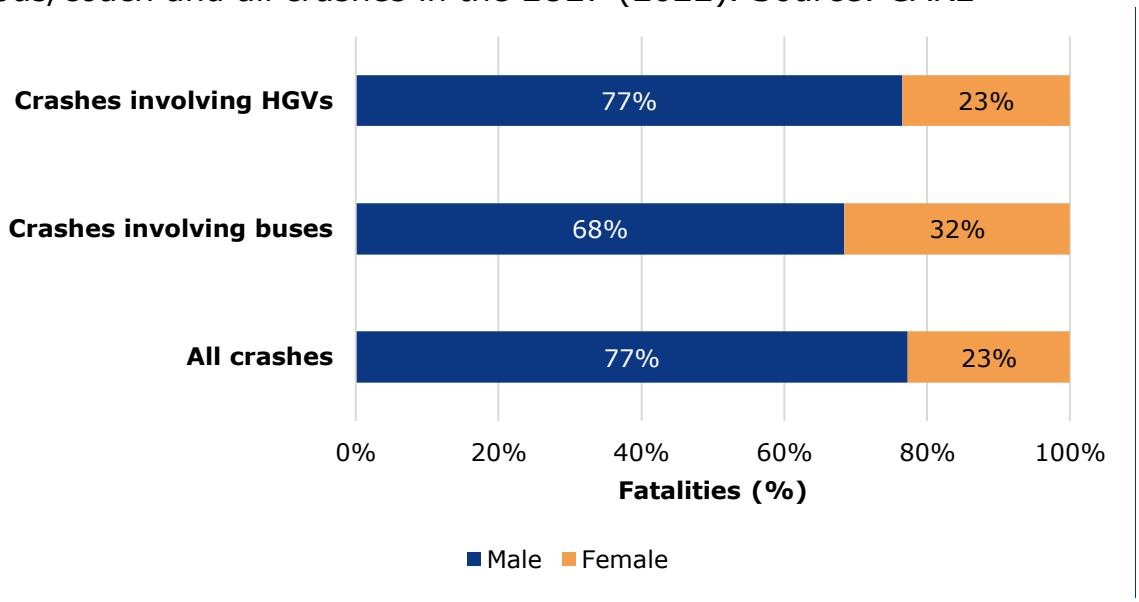


4. Road user

4.1 Gender

Fatalities in bus/coach crashes differ in terms of gender distribution in comparison to HGV crashes and all crashes, as the female share amounts to 32% (bus/coach) compared to 23%.

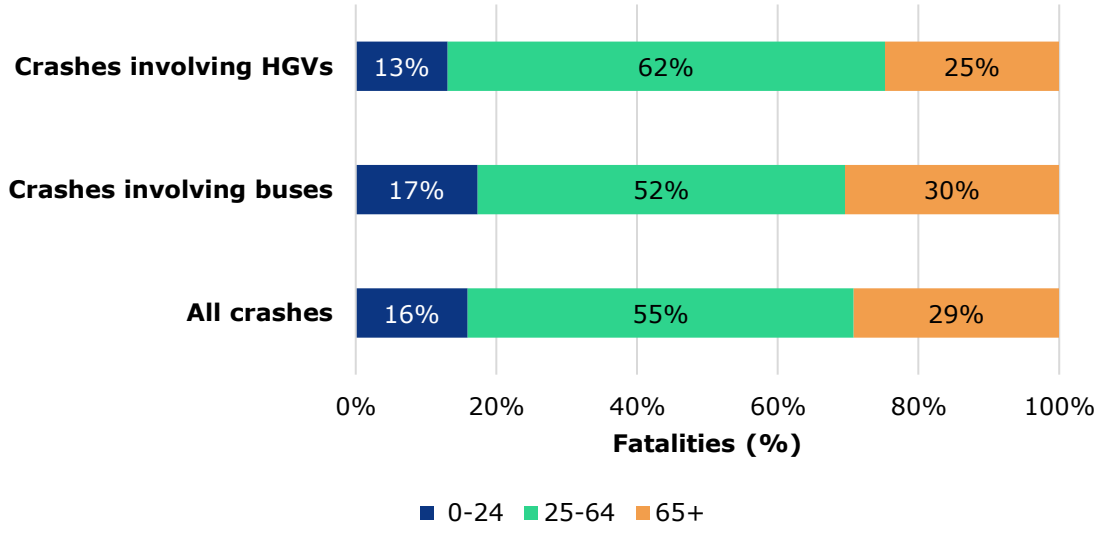
Figure 10. Distribution of fatalities by gender in crashes involving HGV, bus/coach and all crashes in the EU27 (2022). Source: CARE



4.2 Age

The age distribution of fatalities in crashes involving buses/coaches and HGVs does not differ significantly from the distribution of all fatalities in road traffic. The proportion of fatalities in the **65+ age group** in crashes **involving buses/coaches** is **higher (30%) than** in crashes involving **HGVs**, where the proportion of fatalities in the 65+ age group is **25%**.

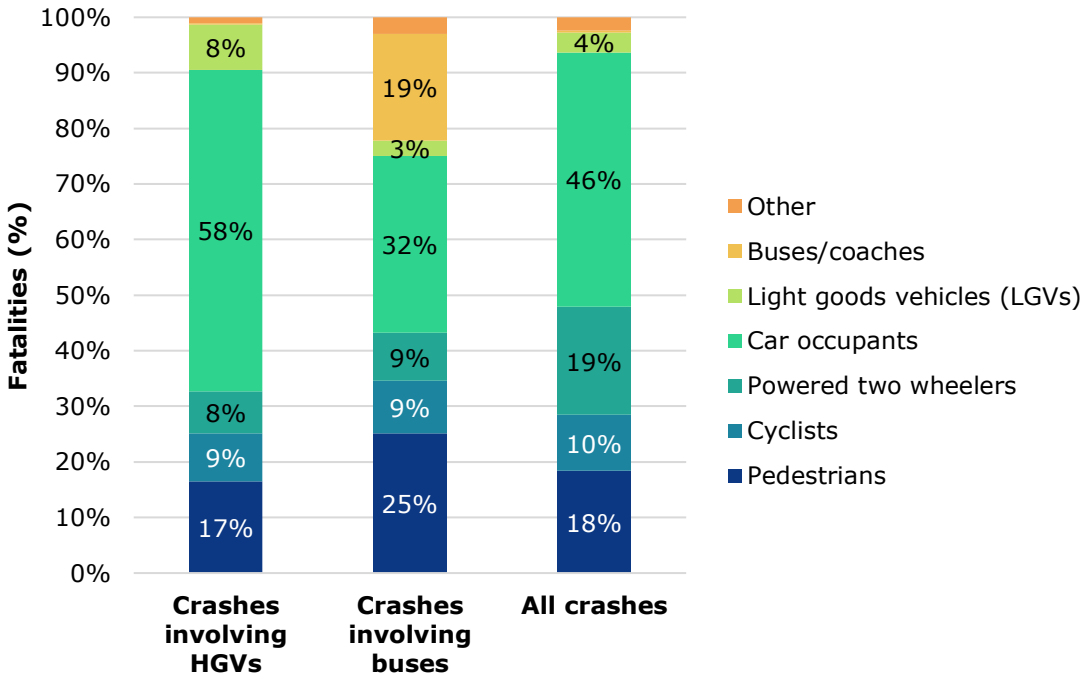
Figure 11. Distribution of fatalities by age category in crashes involving HGVs, buses/coaches and all crashes in the EU27 (2022). Source: CARE



4.3 Transport modes

This figure compares the distribution of fatalities by transport mode in crashes involving HGVs, buses/coaches and all road users. **In all compared categories**, HGVs, buses/coaches and all road crashes, **car occupants account for the largest proportion of fatalities.** Car occupants make up 58% of fatalities involving HGV crashes, 32% of fatalities in bus/coach crashes and 46% of fatalities in all crashes. Also, pedestrians have a high share of fatalities across all compared categories.

Figure 12. Distribution of fatalities by transport mode in crashes involving HGV, bus/coach and all crashes in the EU27 (2022). Source: CARE

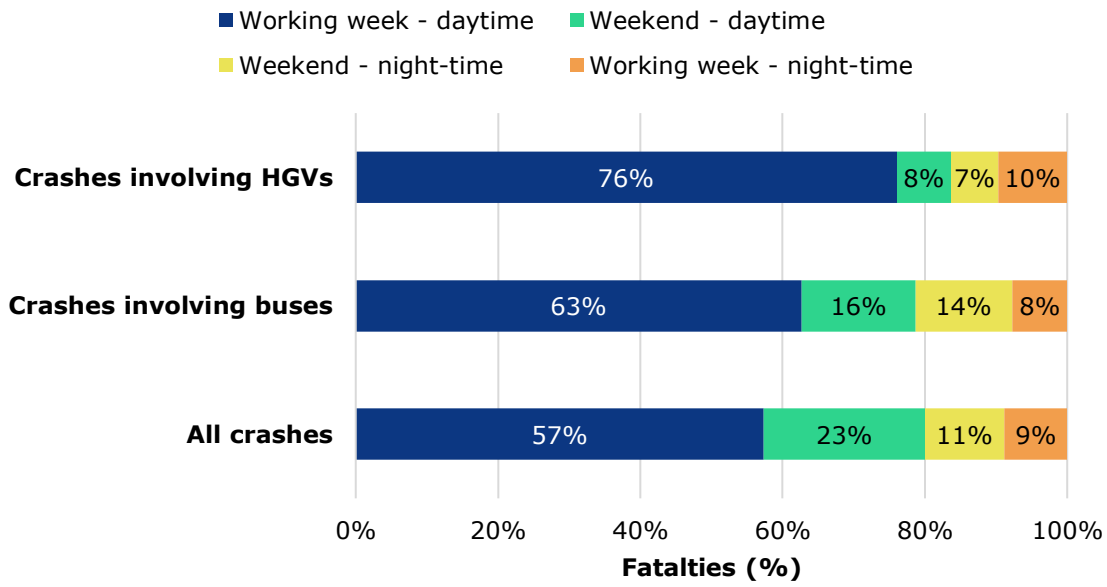


5. Time

5.1 Period of the week

HGV crashes mainly occur during **the working week at daytime**. Further, bus/coach fatalities are also **high during the working week** compared to all crashes.

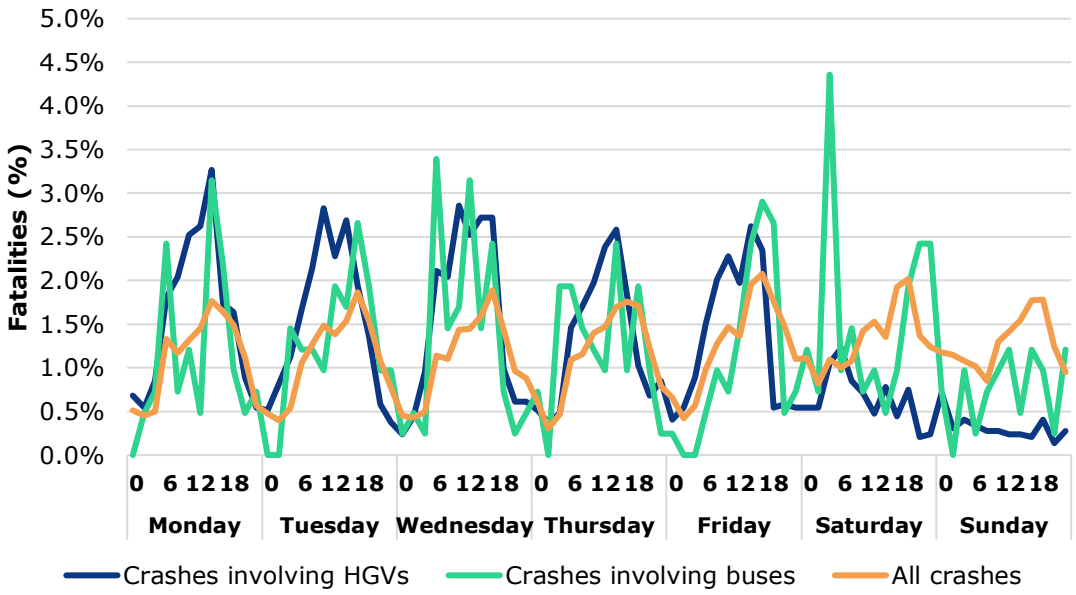
Figure 13. Distribution of fatalities by period of the week in crashes involving HGV, bus/coach and all crashes in the EU27 (2022). Source: CARE



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

As mentioned before and shown in the figure below**, HGV fatalities** mainly **occur at daytime during the working week**. Whereas **bus/coach crashes** fluctuate during the whole week even though the share is slightly **higher during working weeks** and on Saturdays.

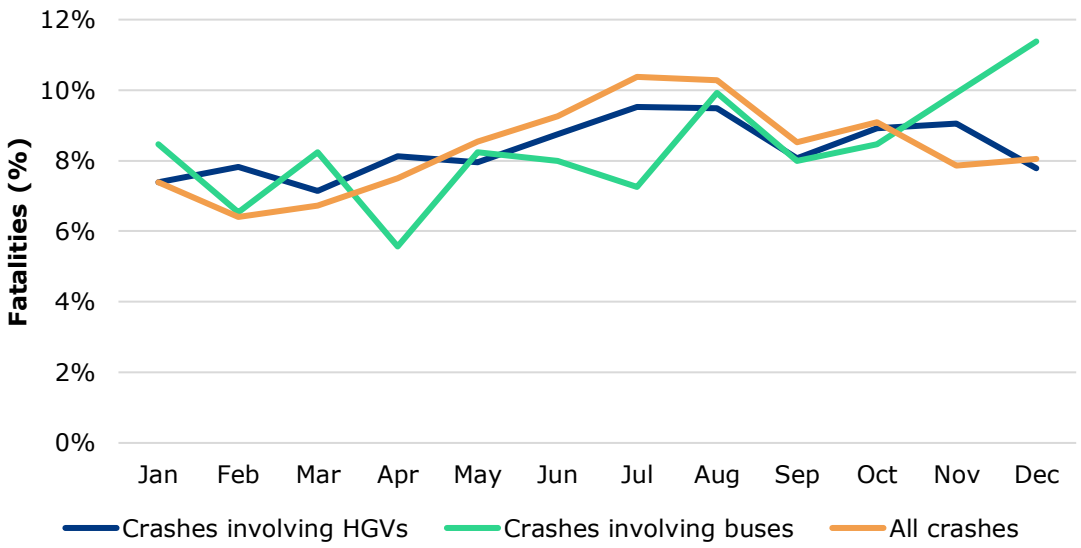
Figure 14. Distribution of fatalities by day of the week and hour in crashes involving HGVs, buses/coaches and all crashes in the EU27 (2022). Source: CARE



5.3 Month

The share of fatalities involving HGVs is the highest in July and August, which is similar to the distribution of fatalities in all crashes. **The share of fatalities involving buses is the highest in December.** Overall, there is a remarkable difference between fatalities in bus and HGV crashes.

Figure 15. Distribution of fatalities in crashes involving HGVs, buses/coaches and all crashes by month in the EU27 (2022). Source: CARE

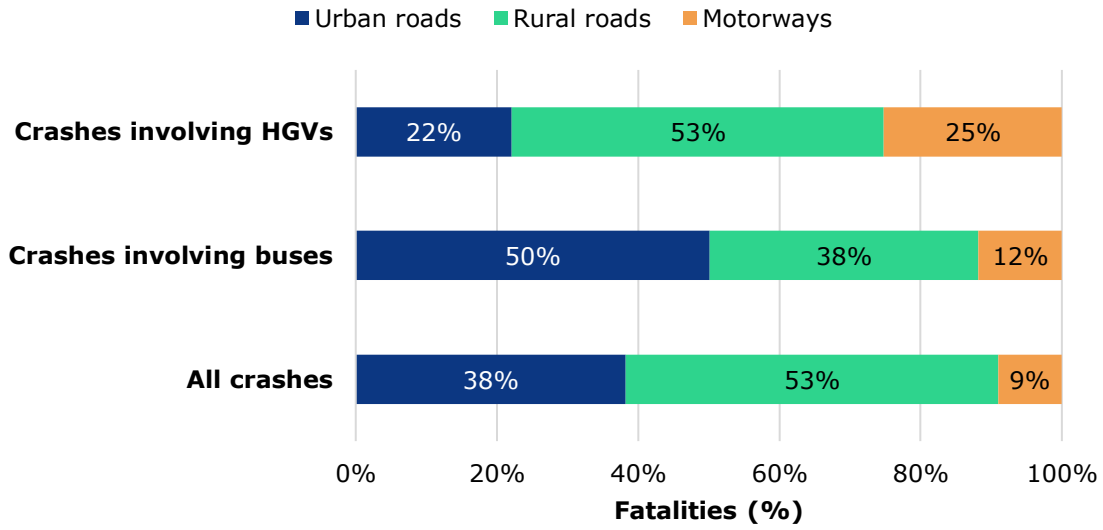


6. Location

6.1 Road type

The share of road **fatalities on motorways in** crashes involving **HGVs (25%)** is about **three times higher** than the respective share in **all crashes (9%). The share of fatalities on urban roads in crashes** involving **HGVs is remarkably lower (22%)** than the respective share in **all crashes (38%).** The **share of fatalities** in crashes involving **buses/coaches** differs in the distribution by road type compared to all crashes, with a **considerable higher share of fatalities on urban roads (50%).**

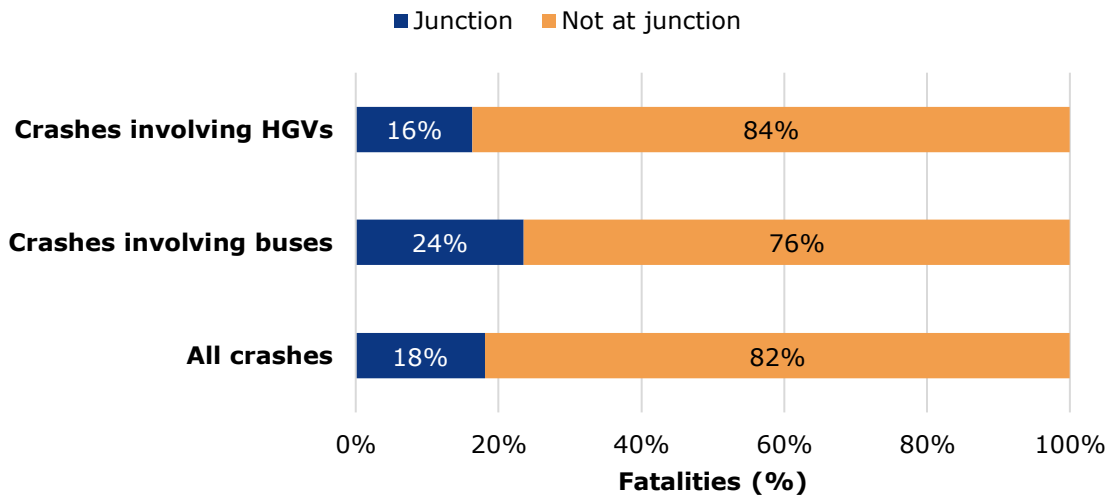
Figure 16. Distribution of fatalities by road type in crashes involving HGVs, buses/coaches and all crashes in the EU27 (2022). Source: CARE



6.2 Junction

The share of fatalities in crashes involving **buses/coaches at junctions** amounts to **24%**, compared to **16%** for fatalities in crashes involving **HGVs** and **18%** for fatalities in **all road crashes**.

Figure 17. Distribution of fatalities in crashes involving HGVs, buses/coaches and all crashes at junctions and not at junctions in the EU27 (2022). Source: CARE



7. Notes

7.1 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.

Bus / coach
Motor vehicles - with or without a trailer for the transport of passengers' luggage – intended, by virtue of their construction and equipment, to transport more than 9 persons, including the driver. Passenger carrying vehicles.

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.

Fatalities in HGV crashes
All fatalities in a crash in which an HGV was involved, including pedestrians and cyclists as well as the occupants (drivers and passengers) of all vehicles in such collisions including the HGV itself.

Heavy goods vehicles (HGVs)
Motor vehicles designed and constructed primarily for the carriage of goods with a maximum allowed mass (MAM) or gross combination mass (GCM) of over 3.5 tonnes.

HGV occupant fatalities
Fatalities among the occupants of an HGV

Junction
Location, where two or more roads meet and traffic can change between different routes, directions, or sometimes modes of travel.

Light goods vehicles (LGVs)
Motor vehicles designed and constructed primarily for the carriage of goods with a maximum mass not exceeding 3.5 tonnes.

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.

7.2 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.

7.3 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.

7.4 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.

7.5 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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