Main figures on Road Traffic Accidents

Spain 2017

SUMMARY

MINISTERIO DEL INTERIOR

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"Main figures on Road Traffic Accidents" began publication in 2004 with the aim of becoming the benchmark publication in Spain for analysing the trend in the number and characteristics of road traffic accidents as well as assessing the impact of major policies on road safety. The Directorate-General for Traffic (DGT) hopes that the fact that we have published this 15th issue means that the objective has been reached, at least partially.

The drafting of the 2017 report has been marked by the process of internal reflection undergone by DGT in recent months with a view to identifying those areas requiring further efforts in the short and medium term. Although Spain still has a low traffic fatality rate as compared with many EU countries, 2017 was the fourth consecutive year where road fatality rate increased. If we intend to reduce fatality rate, policy interventions must be clearly formulated, aimed at well-defined areas and built on the experience accumulated in Spain and in the countries around us.

In 2017, the figure for road fatalities was 1,830 which means a mortality rate of 39 deaths per million population, i.e., Spain ranks eighth in the list of the European Union countries with the lowest fatality rates. In 2010, DGT set the strategic target of being below 37 deaths per million population; this objective was achieved in 2013 with a rate of 36 deaths; however, developments over the last few years have moved this trend away from the target and strong actions are needed.

From the DGT point of view, the following areas and groups are particularly relevant and should be considered as strategic:

– Conventional roads: 1,013 fatalities account for 55% of all fatalities reported in road traffic accidents; 77% if we restrict to interurban roads. In 2017, fatality figure on interurban roads increased by 5% compared with the previous year; this contrasts with the 8% decrease recorded on dual carriageways.

– Vulnerable road users: they account for 46% of fatalities (pedestrians: 351 fatalities; bicycles: 78 fatalities; mopeds: 49 fatalities; motorcycles: 359 fatalities). Within this group, notable is the recent evolution in the number of killed motorcycle users: from 2014 to 2017, motorcyclist fatalities have increased by 25%, more than any other means of transport. Cyclist fatalities have also increased between 2015 (58) and 2017 (78); this increase mainly happened on urban roads.

– Urban roads, in 2017 there were 509 deaths, of which 80% were vulnerable road users. In particular, there were 248 pedestrian fatalities, of which 71% were 65 years of age or over.

– Vans. The percentage of accidents involving at least one van increased from 8.6% in 2013 to 10.9% in 2017.

As regards risky behaviours, this report highlights that the problems related to distractions when driving, the excessive and inappropriate speed and alcohol and drugs consumption still remain worrying:

– Distraction: it is a contributory factor in 33% of fatal accidents.

– Excessive and inappropriate speed: it is a contributory factor in 29% of fatal accidents.

– Alcohol and drugs consumption: alcohol is a contributory factor in 26% of fatal accidents; if we also take into account illegal drugs, one out of three killed drivers had consumed alcohol and/or other drugs.

This obliges us to redouble our efforts in the fields of training, awareness-raising and monitoring of risky behaviours.

This report is complemented by a section to be published on DGT website that will compare mortality resulting from a road traffic accident to mortality due to other causes as well as the analysis of the main available hospital indicators.

As in previous years, we have been in close cooperation with: Autonomous Communities that have powers on traffic surveillance; the Ministry of Development, for reviewing the information on roads under their scope; the Spanish National Toxicology and Forensic Science Institute (INTCF) and the Institutes of Forensic Medicine and Science (IML) in Murcia and Galicia. The Directorate-General for Traffic would like to thank all these institutions for their collaboration and the facilities offered to share their consolidated data.

DGT would also like to thank all the people who made the writing of this report possible and especially the Traffic Division of the Guardia Civil, Local and Autonomous Police Forces and the experts at the Provincial Traffic Departments and at the National Road Safety Observatory.

Pere Navarro Olivella
Director-General for Traffic

I. 2017 FIGURES

1 CASUALTY ACCIDENTS IN 2017

In 2017 the various police forces reported 102,233 casualty accidents. A total of 1,830 people were killed at the time of the accident or within 30 days after its occurrence; besides, 9,546 people were admitted to hospital and 129,616 people were injured but did not require hospitalization, according to police sources. The number of casualty accidents has fallen by 129, compared with the previous year. With regard to casualties, there were 20 more deaths as against 2016 and this means a 1% increase; 209 fewer hospitalised injured casualties, i.e. a 2% reduction; and 1,019 fewer non-hospitalised injured casualties, a decrease by 1%.

On interurban roads there was a 2% increase in the number of road traffic accidents, a 2% increase in fatalities, a 6% decrease in hospitalised injured casualties and a 2% increase in non-hospitalised injured casualties. As for urban roads, the number of road traffic accidents decreased by 1% and fatalities by 2%; non-hospitalised injured casualties increased by 2%, whereas the number of hospitalised injured casualties decreased by 2%.

Analysing in greater detail the distribution of the number of fatalities, certain aspects can be highlighted. First of all, there has been a different evolution on dual carriageways —fall by 8%— and on conventional roads —5% increase—.

As for the type of accident, there has a been a sharp increase in head-on collisions —18% more fatalities— and a decrease in accidents involving pedestrians —by 12%—.

The number of road traffic fatalities has evolved differently by mode of travel. In particular, there were increases in cyclists, with 11 more fatalities (from 67 to 78), which means an increase by 6%; in motorcyclists, by 5%; in car occupants, by 6%; and in goods vehicle occupants, by 8%. On the contrary, there were decreases in the number of bus or coach occupants, 18 fewer fatalities (from 21 to 3), and in moped users, 5 fewer fatalities (from 54 to 49).

As for the age of fatalities, a significant increase by 31% can be observed in the 25-34 age group. The 75-84 and 85+ age groups showed reductions by 12% and 15% respectively.

Most casualty accidents occur on urban roads, 63% of the total. The highest number of road deaths was recorded on conventional roads (55% of the total number, 77% if the analysis only takes interurban roads into account). 76% of accidents occurred on a weekday, which account for 68% of fatalities. As regards the type of accident, although side, rear and multiple collisions represent well over half of the accidents, run-off-road collisions account for the largest proportion of fatalities.

Despite the fact that a car was involved in 77% of casualty accidents, car fatalities represent 44% of the total. Pedestrians are the most vulnerable road users, as stated by the fact that they were involved in 13% of casualty accidents but they account for 19% of the total number of fatalities. In terms of injury severity, they are followed by motorcyclists, who were involved in 27% of the accidents, which resulted in 20% of road deaths. As regards age, 45% of fatalities were aged between 35-54 years. In 69% of casualty accidents at least one male individual was involved.

Table 1. Number of casualty accidents, fatalities, hospitalised injured casualties and non-hospitalised injured casualties. Percentage difference compared with the previous year. Spain, 2017

	2017				Variation I 2017/2016			
	Casualty accidents	Fatalities	Hospitalised injured casualties	Non-hospitalised injured casualties	Casualty accidents	Fatalities	Hospitalised injured casualties	Non-hospitalised injured casualties
Total	**102,233**	**1,830**	**9,546**	**129,616**	**0%**	**1%**	**-2%**	**-1%**
Location								
Interurban road	37,493	1,321	4,766	52,340	2%	2%	-6%	2%
Motorway	3,932	85	285	6,036	9%	0	-2%	10%
Dual c'way	8,608	223	728	13,224	0%	-8%	-12%	0%
Conventional road	24,953	1013	3,753	33,080	2%	5%	-5%	1%
Urban road	64,740	509	4,780	77,276	-1%	-2%	2%	-2%
Cross-town link	1,655	48	162	2,073	13%	1	9%	15%
Streets	62,434	457	4,592	74,311	-2%	-2%	2%	-3%
Urban motorway/ dual c'way	651	4	26	892	0%	-1	-9	0%
Days of week								
Weekday	77,801	1,247	6,586	97,113	1%	1%	0%	0%
Weekend	24,432	583	2,960	32,503	-2%	1%	-6%	-4%
Type of accident								
Head-on collision	3,071	327	916	4,620	-2%	18%	-5%	-6%
Side and T-bone collision	29,867	259	2,273	38,319	-1%	2%	1%	-2%
Rear and multiple collision	23,302	144	1,031	36,825	-3%	-1%	0%	-3%
Run-off-road collision	14,729	601	2,015	17,142	-10%	0%	-8%	-11%
Overturning	3,611	20	251	3,826	28%	-2	-3%	34%
Pedestrian impact[2]	13,439	338	1,906	12,905	-4%	-12%	-3%	-4%
Other type	14,214	141	1,154	15,979	19%	12%	3%	23%
Mode of travel[3]								
Bicycle	8,065	78	694	7,075	5%	11	-6%	7%
Moped	7,574	49	618	7,335	-5%	-5	-1%	-5%
Motorcycle	27,165	359	2,784	25,551	5%	5%	4%	5%
Car	78,221	799	2,864	67,388	-1%	6%	-4%	-2%
Goods vehicle	16,227	155	458	7,128	3%	8%	-4%	2%
Bus or coach	2,202	3	47	1,971	-1%	-18	-36	-8%
User[3,4]								
Driver	80,833	1,171	5,992	83,122	1%	6%	-3%	1%
Passenger	25,014	308	1,614	34,112	-3%	-4%	0%	-4%
Pedestrian[2]	13,727	351	1,940	12,382	-3%	-10%	-2%	-3%

	2017				Variation[1] 2017/2016			
	Casualty accidents	Fatalities	Hospitalised injured casualties	Non-hospitalised injured casualties	Casualty accidents	Fatalities	Hospitalised injured casualties	Non-hospitalised injured casualties
Age[3,4]								
0-14	5,845	35	346	6,611	-5%	7	-10%	-5%
15-24	19,377	200	1,398	22,094	-3%	1%	-1%	-4%
25-34	26,030	293	1,657	27,444	-3%	31%	2%	-4%
35-44	25,608	289	1,702	26,363	-2%	0%	-5%	-2%
45-54	20,291	291	1,705	20,091	2%	-6%	1%	2%
55-64	12,473	246	1,138	12,113	5%	7%	-2%	6%
65-74	6,865	191	771	6,552	2%	-4%	-2%	2%
75-84	4,023	185	518	3,658	-3%	-12%	-15%	-1%
85 and over	1,254	89	180	1,016	7%	-15%	5%	9%
Gender[3,4]								
Male	70,592	1,403	6,708	75,886	0%	1%	-2%	0%
Female	45,294	424	2,806	52,843	-2%	3%	-3%	-3%

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

[2] The number of people being killed when struck by a vehicle does not include all pedestrians hit by a vehicle because the classification by type of accident is made considering the first manoeuvre and not its harmful outcome.

[3] In the casualty accident indicator, the addition does not correspond to the total because the same accident can fall under various subheadings.

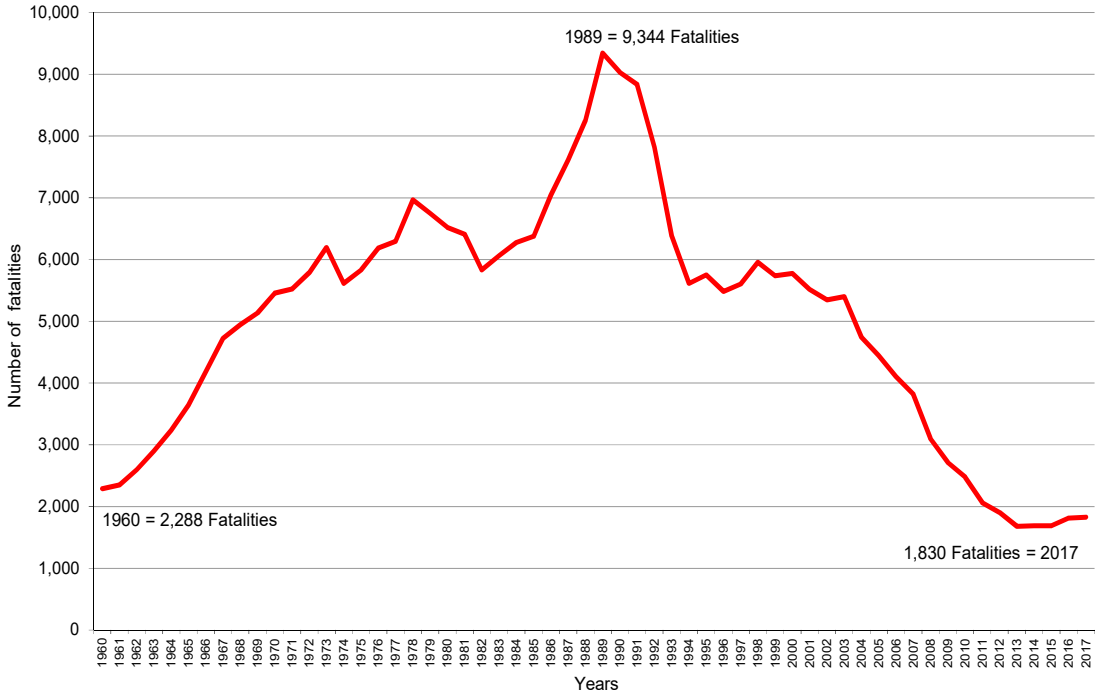
[4] Accidents involving at least 1 casualty are recorded on the reference group.

2 The evolution

Evolution from 1960 to 2017

The evolution in road fatality figures shows that, since records began, as of 1960 there was an overall general upwards pattern until it reached a maximum in 1989, a year in which 9,344 fatalities were recorded. Since then, the number of road deaths has steadily decreased, more or less markedly, until reaching the lowest annual total on record in 2013 with 1680 people being killed. In 2017, the last year on record, 1,830 people were killed in road traffic accidents, which means an increase for the fourth consecutive year.

Figure 1. Evolution of road traffic fatalities. Spain, 1960-2017



Evolution of the main indicators 2008-2017

General Information

When comparing the year 2017 with 2016, it can be observed that the number of fatalities has increased by 1%, the figure for hospitalised injured casualties has decreased by 2% and non-hospitalised injured casualties by 1%. A close look at the evolution up to 2014 reveals the general trend was for fatalities and hospitalised injured casualties to fall, but this trend ceased from 2014 onwards. The total number of casualty accidents has shown decreases and increases, lacking a stable trend, which may be related to changes in the level of reporting or, in other words, in the coverage of the information system.

Fatality and hospitalised injured casualty rates per inhabitant and per vehicle in service show a similar trend to that in absolute numbers, that is, a downward trend up to 2014, followed by a standstill period for injured casualties and an upward trend for fatalities.

Table 2. Main accident rate indicators and exposure to risk Spain, 2008-2017

Indicator	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Difference[1] 2017/2016	Year-on-year variation 2008-2017
Casualty accidents	93,161	88,251	85,503	83,027	83,115	89,519	91,570	97,756	102,362	102,233	0%	1%
Fatalities	3,100	2,714	2,478	2,060	1,903	1,680	1,688	1,689	1,810	1,830	1%	-6%
Hospitalised injured casualties	16,488	13,923	11,995	11,347	10,444	10,086	9,574	9,495	9,755	9,546	-2%	-6%
Non-hospitalised injured casualties	114,459	111,043	108,350	104,280	105,446	114,634	117,058	124,960	130,635	129,616	-1%	1%
Fatalities per million population	68	59	53	44	41	36	36	36	39	39	0	-29
Average daily fatalities	8	7	7	6	5	5	5	5	5	5	0	-3
Vehicle fleet	32,961,280	32,795,334	32,961,569	33,082,931	32,962,502	32,616,105	32,623,936	32,986,384	33,650,392	34,430,815	2%	0%
Fatalities per million vehicles in service	94	83	75	62	58	52	52	51	54	53	-1	-41
Case fatality rate[2]	2.3	2.1	2	1.8	1.6	1.3	1.3	1.2	1.3	1.3	0	-1.0
Hospitalised injured casualties per M p.tion	361	301	258	243	223	216	206	204	210	205	-2%	-6%
Vehicle-km traffic 106 *	251,749	249,371	241,131	234,678	224,285	221,610	222,689	230,840	239,353	244,661	2%	-3%

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

[2] Case fatality rate refers to the number of fatalities per 100 casualties.

** Source: Yearbooks from the Spanish Ministry of Development. Data refer to interurban roads.*

Vehicle fleet

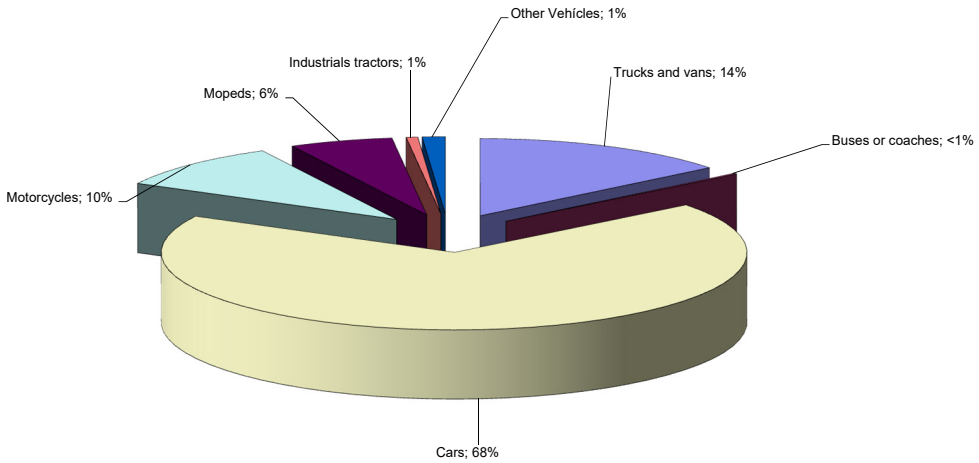
The vehicle fleet has increased by more than one million vehicles in the last decade, considering all categories of vehicles. There has been an increase of 780,423 vehicles in the total vehicle fleet in 2017 compared with the previous year. The greatest increase in absolute figures is for cars, with 623,571 more vehicles, which represents an increase by 3% in percentage terms. In absolute terms, they are followed by motorcycles with 115,574 more units, which means an increase by 4%. Moped category showed a negative result: a decrease by 1%. The vehicle fleet is mainly made up by cars with more than 23 million units accounting for 68% of the fleet; cars are followed by trucks and vans, 14%; and by motorcycles, 10%.

Table 3. Evolution of the vehicle fleet over the last 10 years Spain, 2008-2017

Vehicle Fleet	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Diff. % 2017/2016	Year-on-year variation 2008-2017
Trucks and vans	5,192,219	5,136,214	5,103,980	5,060,791	4,984,722	4,887,352	4,839,484	4,851,518	4,879,480	4,924,476	1%	-1%
Buses or coaches	62,196	62,663	62,445	62,358	61,127	59,892	59,799	60,252	61,838	63,589	3%	0%
Cars	22,145,364	21,983,485	22,147,455	22,277,244	22,247,528	22,024,538	22,029,512	22,355,549	22,876,830	23,500,401	3%	1%
Motorcycles	2,500,819	2,606,674	2,707,482	2,798,043	2,852,297	2,891,204	2,972,165	3,079,463	3,211,474	3,327,048	4%	3%
Mopeds	2,410,685	2,352,205	2,290,207	2,229,418	2,169,668	2,107,116	2,061,044	2,023,211	1,987,470	1,961,523	-1%	-2%
Industrial Tractors	213,366	206,730	199,486	195,960	186,964	182,822	186,060	195,657	207,889	218,154	5%	0%
Other vehicles[1]	436,631	447,363	450,514	459,117	460,196	463,181	475,872	420,734	425,411	435,624	2%	0%
Total	**32,961,280**	**32,795,334**	**32,961,569**	**33,082,931**	**32,962,502**	**32,616,105**	**32,623,936**	**32,986,384**	**33,650,392**	**34,430,815**	**2%**	**0%**

[1] *The 'other vehicles' category includes special vehicles such as sweepers, winter service vehicles, cranes, construction machinery, etc. Trailers and semi-trailers have been excluded.*

Figure 2. Percentage distribution of the vehicle fleet Spain, 2017



The average age of vehicles under 25 years ranges from 8.5 years for industrial tractors to 13 years for trucks exceeding 3 500 kg. The average age of buses or coaches is 9.8 years. The average age of cars is 10.8 years, over the average age of 9.5 years for motorcycles.

Table 4. Age of the vehicle fleet*. Spain, 2011-2017

Age of the Vehicle Fleet	Trucks <3,500kg	Trucks >3,500kg	Industrial tractors	Vans	Buses or coaches	Cars	Motorcycles
2011	9.0	11.4	8.3	11.8	8.9	9.3	8.8
2017	12.5	13.0	8.5	11.8	9.8	10.8	9.5

* *Only vehicles under 25 years have been considered.*

Registered drivers

In 2017 the number of registered drivers in the DGT Drivers Register was 26,649,453, which means an increase by 1% compared with 2016. The registered driver rate was at 674 per thousand driving age population. The rate for the age group 35-54 was above 800 drivers per thousand population; for the age groups 25-34 and 55-64 was above 700 drivers per thousand population; and for the 65-69 age group was above 600.

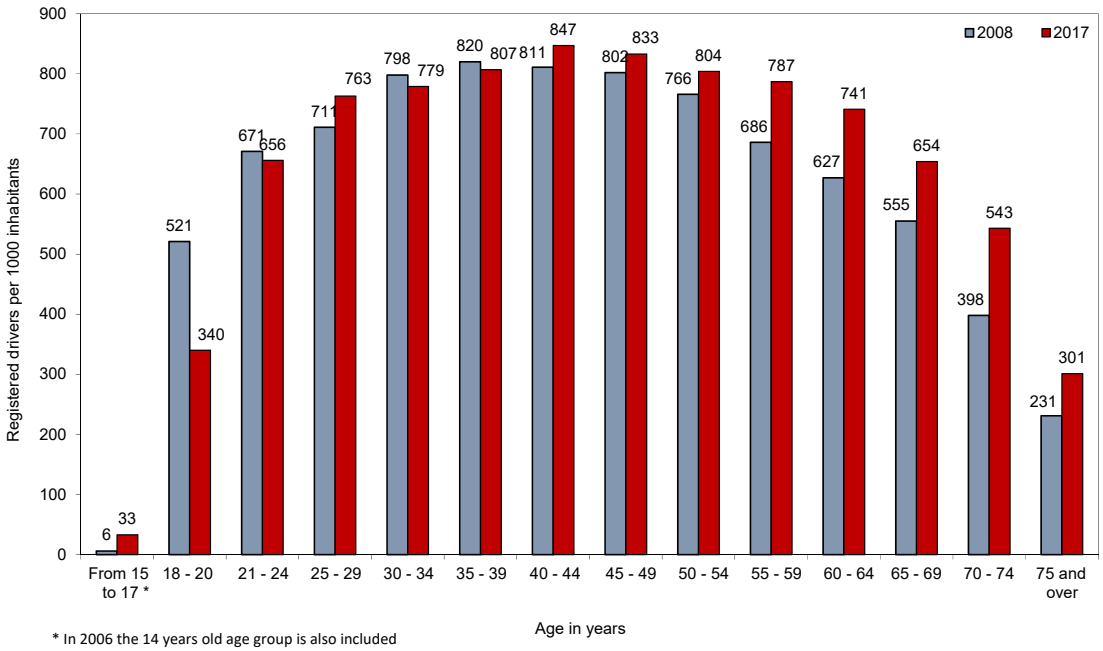
Table 5. Evolution in the number of registered drivers. Number of holders of at least a driving licence or permit. Spain, 2008-2017

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Difference 2017/2016	Year-on-year variation 2008-2017
25,495,368	25,732,387	25,799,005	26,133,510	26,323,971	26,401,660	26,217,202	26,350,036	26,514,026	26,649,453	135,427	0.5%

Table 6. Evolution of the registered driver rate per thousand driving age population. Spain, 2008-2017

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
647	646	652	659	662	666	665	669	673	674

Figure 3. Registered drivers per thousand driving age population. Spain, 2008-2017



* In 2006 the 14 years old age group is also included

Road network

It is estimated that the Spanish public road network totals more than 660,000 kilometres, of which, according to a survey conducted in 1998, more than 489,000 kms belong to City Councils (361,000 kms are interurban roads and 128,000 kms are urban roads) and 11,300 kms belong to other bodies.

165,686 kms of interurban roads belonging to the Central Administration, the Autonomous Communities, the Provincial Governments and the Island Councils, corresponding to 2017, are recorded and classified in the Statistical Yearbooks of the Ministry of Development whereas the rest of the public roads - mainly belonging to municipal authorities - are not recorded accurately, lacking information regarding their length or their features.

Of the abovementioned 165,686 kilometres of interurban roads, 2% (3,039 kms) were toll motorways; 7% (12,484 kms) were non-toll motorways or free highways; 1% (1,641 kms) were dual carriageways and 148,522 kms (90%) corresponded to other road types.

Table 7. Length (km) of the interurban road network. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Increase in km 2017/2016
Toll motorway	2,997	3,016	2,991	3,022	3,025	3,026	3,020	3,040	3,039	3,039	0
Non-toll motorway	10,521	11,005	11,271	11,509	11,676	11,955	12,029	12,296	12,405	12,484	79
Dual c'way	1,587	1,599	1,703	1,651	1,634	1,602	1,656	1,686	1,665	1,641	-24
Rest of roads	149,903	149,843	149,822	149,703	149,260	148,778	149,579	148,981	148,374	148,522	148
Total	**165,008**	**165,463**	**165,787**	**165,885**	**165,595**	**165,361**	**166,284**	**166,003**	**165,483**	**165,686**	**203**

Source: Statistical Yearbooks of the Ministry of Development

In 2017, the road network belonging to the Central Administration was 26,393 kilometres, of which 45% of them were high capacity roads: motorways, highways and dual carriageways. On the contrary, high capacity roads in the regional and provincial road networks accounted only for 4% of the total.

Table 8. Length (km) of the interurban road network by ownership and road type. Spain, 2017

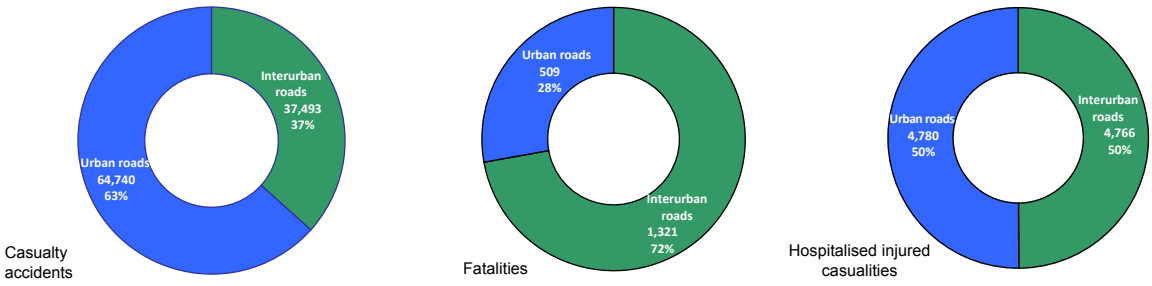
Type of road	Central Administration	Autonomous Communities	Provincial Governments and Island Councils	Total
Toll motorway	2,539	329	171	3,039
Non-toll motorway	8,949	2,929	606	12,484
Dual c'way	486	758	397	1,641
Rest of roads	14,419	67,309	66,794	148,522
Total	**26,393**	**71,325**	**67,968**	**165,686**

Source: Yearbooks of the Ministry of Development.

3 The location of casualty accidents

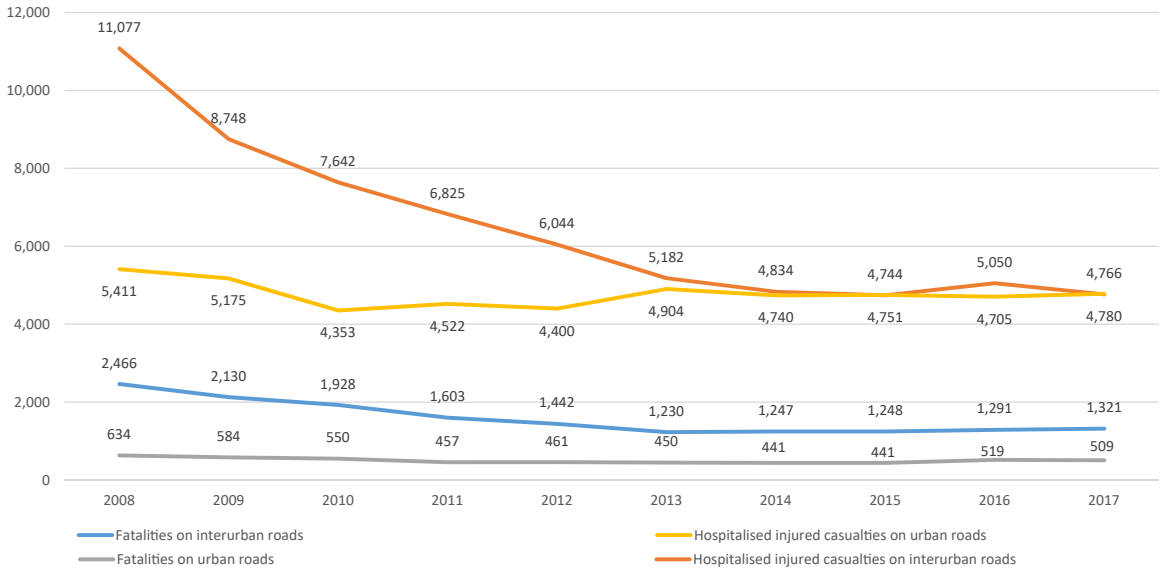
In 2017, most casualty accidents happened on urban roads; 63% of all road accidents occurred on this type of road. However, fatality rate is greater on interurban roads with 72% of the total. As regards the number of hospitalised injured casualties, they are distributed in a similar proportion both on interurban and urban roads.

Figure 4 Distribution of casualty accidents, fatalities and hospitalised injured casualties by area. Spain, 2017



Until 2013, there had been reductions in the number of fatalities and hospitalised injured casualties on interurban roads; that downward trend was also the case for the number of fatalities on urban roads up to the year 2014. Between 2014 and 2017, fatalities on interurban roads increased by 6% and on urban roads by 15%; as compared to 2016, on interurban roads there were 30 more fatalities, an increase by 2%, and on urban roads there were 10 fewer fatalities, a decrease by 2%. As for hospitalised injured casualties, there was a decrease by 6% on interurban roads and an increase by 2% on urban roads.

Figure 5. Evolution of road fatalities and injured casualties admitted to hospitals occurred on interurban and urban roads. Spain, 2008-2017



Interurban roads

In 2017, 37% of casualty accidents were recorded on interurban roads, totalling the figure of 37,493 accidents. 72% of fatalities (1,321 deaths) and 50% of hospitalised injured casualties (4,766 injured) resulted from those accidents.

In 2017 there was an increase by 2% in the number of road fatalities on interurban roads as compared to the previous year. On these roads, the number of hospitalised injured casualties decreased by 6% but non-hospitalised injured casualties increased by 2%.

For the past ten years, although the year over year reduction rate for fatalities was at 7%, it should be borne in mind that from 2013 onwards the year over year rate has turned positive, which means an increase by 1%.

As for mobility rates, the number of fatalities per hundred million vehicle-kms has reduced from 0.98 to 0.54 for the period 2008-2017.

Table 9. Casualty accidents, fatalities, hospitalised injured casualties and non-hospitalised injured casualties. Total and interurban roads. Spain, 2017

2017	Total	Interurban roads	% interurban roads
Casualty accidents	102,233	37,493	37%
Fatalities	1,830	1,321	72%
Hospitalised injured casualties	9,546	4,766	50%
Non-hospitalised injured casualties	129,616	52,340	40%

Table 10. Evolution of casualty accidents on interurban roads. Spain, 2008-2017

Interurban roads	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
Casualty accidents	43,831	40,789	39,174	35,878	35,425	37,297	35,147	34,558	36,721	37,493	2%	-2%
Fatalities	2,466	2,130	1,928	1,603	1,442	1,230	1,247	1,248	1,291	1,321	2%	-7%
Hospitalised injured casualties	11,077	8,748	7,642	6,825	6,044	5,182	4,834	4,744	5,050	4,766	-6%	-9%
Non-hospitalised injured casualties	56,222	54,180	52,247	47,692	47,936	51,320	48,693	48,036	51,379	52,340	2%	-1%
Traffic vehicle-km 10^{6}[(1)]	251,749	249,371	241,131	236,065	224,285	221,610	222,689	230,840	239,353	244,661	2%	-3%
Fatalities per hundred million vehicle-km	0,98	0,85	0,80	0,68	0,64	0,56	0,56	0,54	0,54	0,54		

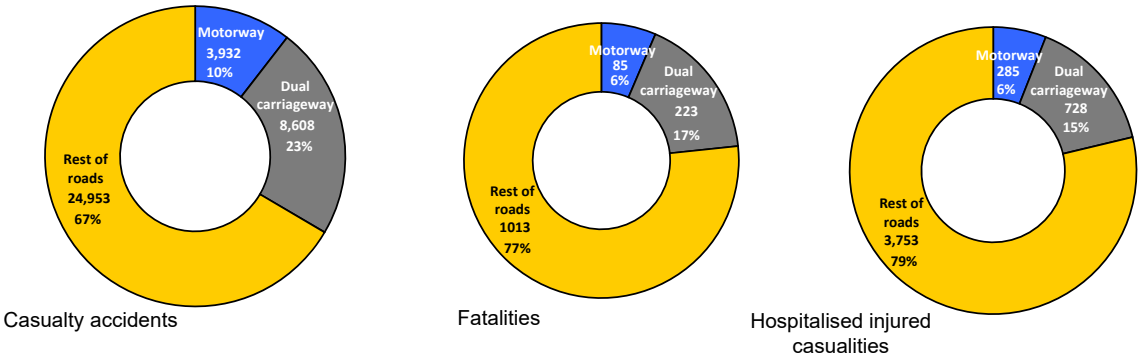
[(1)] *Source: Yearbooks from the Spanish Ministry of Development.*

Of the 37,493 accidents on interurban roads, 3,932 occurred on motorways, with 85 deaths, that is, 6% of the total figure for fatalities on interurban roads; there were 285 hospitalised injured casualties, that is 6%. 8,608 accidents were recorded on dual carriageways, with 223 deaths, accounting for 17% of all fatalities on interurban roads and 728 hospitalised injured casualties, which accounted for 15% of all hospitalised injured casualties on interurban roads. There were 1,013 fatalities on conventional roads, accounting for 77% of all fatalities on interurban roads; 3,753 injured casualties were hospitalised, which accounted for 79% of the total.

Table 11. Casualty accidents, fatalities, hospitalised and non-hospitalised injured casualties on interurban roads by road type. Spain, 2017

	Motorway	% Motorway	Dual c'way	% Dual c'way	Other Roads	% Others	Total
Casualty accidents	3,932	10%	8,608	23%	24,953	67%	37,493
Fatalities	85	6%	223	17%	1,013	77%	1,321
Hospitalised injured casualties	285	6%	728	15%	3,753	79%	4,766
Non-hospitalised injured casualties	6,036	12%	13,224	25%	33,080	63%	52,340
Total casualties	6,406	11%	14,175	24%	37,846	65%	58,427

Figure 6. Distribution of casualty accidents, fatalities and hospitalised injured casualties on interurban roads, by road type. Spain, 2017



As regards the evolution of the accident rate by road type, the Road Catalogue used to classify roads was updated in 2013, so the data cannot be compared with those corresponding to previous years. In 2017 the number of fatalities on motorways was the same as in 2016 and there were 22 fatalities more than in 2013. There has been a decrease by 8% in the number of fatalities on motorways as compared to 2016, and by 2% as compared to 2013. There has been an increase by 5% on the rest of roads as compared to 2016, and by 8% as compared to 2013. In 2017 the number of hospitalised injured casualties has decreased as against 2016 on all road types: by 2% on motorways, by 12% on dual carriageways and by 5% on the rest of roads. Non-hospitalised injured casualties increased by 10% on motorways and by 1% on the rest of roads.

Table 12. Evolution of casualty accidents on interurban roads by road type. Spain, 2013-2017*

Casualty accidents	2013	2014	2015	2016	2017	2017/2016
Motorway	2,456	2,369	2,398	3,592	3,932	9%
Dual c'way	8,712	8,411	8,431	8,641	8,608	0%
Other roads	26,129	24,367	23,729	24,488	24,953	2%
Total Interurban	**37,297**	**35,147**	**34,558**	**36,721**	**37,493**	**2%**

** In 2013 the road catalogue was updated to classify accidents occurring on Catalonian interurban roads, so the data cannot be compared with those corresponding to previous years.*

Table 13. Evolution of fatalities on interurban roads by road type. Spain, 2013-2017*

Fatalities	2013	2014	2015	2016	2017	2017/2016(1)
Motorway	63	64	75	85	85	0
Dual c'way	227	226	202	242	223	-8%
Other roads	940	957	971	964	1,013	5%
Total Interurban	**1,230**	**1,247**	**1,248**	**1,291**	**1,321**	**2%**

** In 2013 the road catalogue was updated to classify accidents occurring on Catalonian interurban roads, so the data cannot be compared with those corresponding to previous years.*
(1) The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

Table 14. Evolution of hospitalised injured casualties on interurban roads by road type, Spain, 2013-2017*

Hospitalised injured casualties	2013	2014	2015	2016	2017	2017/2016
Motorway	268	263	223	290	285	-2%
Dual c'way	815	758	741	830	728	-12%
Other roads	4,099	3,813	3,780	3,930	3,753	-5%
Total Interurban	**5,182**	**4,834**	**4,744**	**5,050**	**4,766**	**-6%**

** In 2013 the road catalogue was updated to classify accidents occurring on Catalonian interurban roads, so the data cannot be compared with those corresponding to previous years.*

Table 15. Evolution of non-hospitalised injured casualties on interurban roads by road type, Spain, 2013-2017*

Non-hospitalised injured casualties	2013	2014	2015	2016	2017	2017/2016
Motorway	3,612	3,391	3,694	5,500	6,036	10%
Dual c'way	12,842	12,755	12,839	13,241	13,224	0%
Other roads	34,866	32,547	31,503	32,638	33,080	1%
Total Interurban	**51,320**	**48,693**	**48,036**	**51,379**	**52,340**	**2%**

** In 2013 the road catalogue was updated to classify accidents occurring on Catalonian interurban roads, so the data cannot be compared with those corresponding to previous years.*

Of the 37,493 accidents on interurban roads in 2017, 11,854 occurred on State-owned roads - 32% -, 432 persons were killed; 1,324 persons were hospitalised injured casualties and 17,957 were non-hospitalised injured casualties. On roads belonging to the Autonomous Communities, 10,087 casualty accidents were recorded in 2017, accounting for 27% of all accidents occurring on interurban roads, resulting in 541 persons being killed, 1,695 were hospitalised injured casualties and 13,503 were non-hospitalised injured casualties. Finally, on the roads under the jurisdiction of Provincial Governments and Island Councils, 7,270 casualty accidents were recorded in 2017, in which 219 persons were killed, 1,201 were hospitalised injured casualties and 9,448 were non-hospitalised injured casualties.

Among Autonomous Communities, Provincial Governments and Island Councils more than 60 owners have been identified.

Table 16. Evolution of casualty accidents on interurban roads by road owner. Spain, 2017-2017

Interurban roads	2014	2015	2016	2017	Variation 2017/2016
State[1,2]	10,823	10,567	11,195	11,854	6%
Autonomous Communities	9,677	9,426	9,827	10,087	3%
Provincial Governments and Island Councils	7,161	6,793	7,454	7,270	-2%
Other owners	7,486	7,772	8,245	8,282	0%
Total Interurban	**35,147**	**34,558**	**36,721**	**37,493**	**2%**

[1] In 2014 the procedure to identify State-owned roads was changed, in cooperation with the Directorate-General for Roads within the Ministry of Development.
The data cannot be compared to those for previous years.
[2] In 2016, there were 158 casualty accidents on State-owned urban roads (sections of road running through towns and urban dual carriageways and motorways), which meant 11,353 casualty accidents.

Table 17. Evolution of fatalities on interurban roads by road owner. Spain, 2008-2017

Interurban roads	2014	2015	2016	2017	Variation 2017/2016
State[1]	448	438	464	432	-7%
Autonomous Communities	464	456	477	541	13%
Provincial Governments and Island Councils	232	246	227	219	-4%
Other owners	103	108	123	129	5%
Total Interurban	**1,247**	**1,248**	**1,291**	**1,321**	**2%**

[1] *In 2014 the procedure to identify State-owned roads was changed, in cooperation with the Directorate-General for Roads within the Ministry of Development.*
The data cannot be compared to those for previous years.

Table 18. Evolution of hospitalised injured casualties on interurban roads by road owner. Spain, 2014-2017

Interurban roads	2014	2015	2016	2017	Variation 2017/2016
State[1]	1,372	1,307	1,489	1,324	-11%
Autonomous Communities	1,805	1,733	1,828	1,695	-7%
Provincial Governments and Island Councils	1,141	1,155	1,173	1,201	2%
Other owners	516	549	560	546	-3%
Total Interurban	**4,834**	**4,744**	**5,050**	**4,766**	**-6%**

[1] *In 2014 the procedure to identify State-owned roads was changed, in cooperation with the Directorate-General for Roads within the Ministry of Development.*
The data cannot be compared to those for previous years.

Table 19. Evolution of non-hospitalised injured casualties on interurban roads by road owner, Spain, 2014-2017

Interurban roads	2014	2015	2016	2017	Variation 2017/2016
State[1]	16,181	15,896	16,831	17,957	7%
Autonomous Communities	12,813	12,641	13,161	13,503	3%
Provincial Governments and Island Councils	9,302	8,756	9,841	9,448	-4%
Other owners	10,397	10,743	11,546	11,432	-1%
Total Interurban	**48,693**	**48,036**	**51,379**	**52,340**	**2%**

[1] *In 2014 the procedure to identify State-owned roads was changed, in cooperation with the Directorate-General for Roads within the Ministry of Development.*
The data cannot be compared to those for previous years.

Urban roads

In 2017, 64,740 casualty accidents occurred on urban roads, which resulted in 509 people being killed (28% of the total), 4,780 injured casualties required hospitalization and 77,276 did not. In comparison with the previous year, the number on casualty accidents has decreased by 1%, and the number of fatalities and non-hospitalised injured casualties has also decreased by 2%. However, the number of hospitalised injured casualties has increased by 2%.

Table 20. Evolution of casualty accidents, fatalities, hospitalised injured casualties and non-hospitalised injured casualties on urban roads. Spain, 2008-2017

Urban roads	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
Casualty accidents	49,330	47,462	46,329	47,149	47,690	52,222	56,423	63,198	65,641	64,740	-1%	3%
Fatalities	634	584	550	457	461	450	441	441	519	509	-2%	-2%
Hospitalised injured casualties	5,411	5,175	4,353	4,522	4,400	4,904	4,740	4,751	4,705	4,780	2%	-1%
Non-hospitalised injured casualties	58,237	56,863	56,103	56,588	57,510	63,314	68,365	76,924	79,256	77,276	-2%	3%

Sections of road running through towns are included in urban roads, showing a higher severity ratio than the rest of roads in built-up areas. In 2017, 1,665 casualty accidents were recorded on sections of road running through towns, 13% more than in 2016, in which 48 persons were killed (+1), 162 injured casualties required hospitalization (+9%) and 2, 073 injured casualties did not (+15%).

Table 21. Evolution of casualty accidents, fatalities, hospitalised injured casualties and non-hospitalised injured casualties on sections of road running through towns and rest of urban roads. Spain, 2016-2017

Urban roads	Sections of road running through towns			Others		
	2016	2017	Variation 2017/2016 [1]	2016	2017	Variation 2017/2016
Casualty accidents	1,465	1,655	13%	64,176	63,085	-2%
Fatalities	47	48	1	472	461	-2%
Hospitalised injured casualties	149	162	9%	4,556	4,618	1%
Non-hospitalised injured casualties	1,805	2,073	15%	77,451	75,203	-3%

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

Madrid and Barcelona, two cities with a population of over a million inhabitants, have recorded 11% of fatalities and 25% of hospitalised injured casualties on urban roads. Cities with a population from 100,001 to 500,000 inhabitants have recorded the highest number of fatalities and hospitalised injured casualties: that is, 27% and 28% of the total, respectively.

It should be emphasised that the level of communication in case of a non-fatal accident may vary in both the reporting time-frames and among municipalities, although it should be noted that the population coverage as regards information on the accident rates on urban roads (percentage of the population represented by municipalities reporting road accidents) has significantly increased during the last few years, from 79% in 2008 to 94% in 2017.

Table 22. Fatalities by size of the municipality. Spain, 2008-2017

Population size	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Dist. 2017
Fewer than 5,000 inhab.	57	64	49	49	48	46	38	47	44	43	8%
Between 5,000 and 20,000 inhab.	66	55	67	49	47	49	55	61	71	76	15%
Between 20,001 and 60,000 inhab.	93	69	60	55	65	61	72	63	68	95	19%
Between 60,001 and 100,000 inhab.	69	55	61	43	54	46	39	42	59	63	12%
Between 100,001 and 500,000 inhab.	149	137	149	121	110	128	123	127	149	138	27%
Between 500,001 and 1,000,000 inhab.	82	75	57	50	32	38	38	39	43	40	8%
Over a million inhab.	110	121	107	85	102	82	76	62	85	54	11%
Total	**634**	**584**	**550**	**457**	**461**	**450**	**441**	**441**	**519**	**509**	**100%**
Number of road traffic fatalities lacking a municipality code	8	8	0	5	3	0	0	0	0	0	
% of fatalities in road traffic accidents lacking a municipality code	1%	1%	0%	1%	1%	0%	0%	0%	0%	0%	

Table 23. Hospitalised injured casualties by size of the municipality. Spain, 2008-2017

Population size	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Dist. 2017
Fewer than 5,000 inhab.	272	245	202	250	178	227	206	205	199	183	4%
Between 5,000 and 20,000 inhab.	314	297	286	331	321	422	428	446	540	446	9%
Between 20,001 and 60,000 inhab.	523	450	470	534	590	673	633	737	649	642	13%
Between 60,001 and 100,000 inhab.	560	499	597	500	534	585	503	579	560	573	12%
Between 100,001 and 500,000 inhab.	1,207	1,115	1,103	1,003	1,027	1,279	1,164	1,254	1,281	1,316	28%
Between 500,001 and 1,000,000 inhab.	1,200	1,206	516	590	495	470	501	370	380	446	9%
Over a million inhab.	1,270	1,266	1,152	1,233	1,194	1,248	1,305	1,154	1,096	1,174	25%
Total	**5,411**	**5,175**	**4,353**	**4,522**	**4,400**	**4,904**	**4,740**	**4,751**	**4,705**	**4,780**	**100%**
Number of hospitalised injured casualties in road traffic accidents lacking an INE code	65	97	27	81	61	0	0	6	0	0	
% of hospitalised injured casualties in road traffic accidents lacking a municipality code	1%	2%	1%	2%	1%	0%	0%	0%	0%	0%	

Autonomous communities and provinces

In 2017, as compared to 2016, there has been a decrease in the number of fatalities in 5 autonomous communities: the Canary Islands, Castile-Leon, Galicia, the Valencian Community and the Basque Country. Extremadura remains unchanged, whereas the number of fatalities has increased in the rest of the autonomous communities, outstanding the Murcia region with 27 more deaths, Castile La Mancha with 11 more deaths, Balearic Islands with 8 more deaths and Aragon with 7 more deaths. The autonomous cities of Ceuta and Melilla recorded 4 fatalities, 1 more than in 2016.

Table 24. Evolution of fatalities by autonomous communities. Spain, 2008-2017

Autonomous communities	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016[1]	Year-on-year variation 2008-2017
Andalusia	522	449	399	327	295	283	287	262	303	305	1%	-6%
Aragon	153	122	108	86	86	68	77	71	73	80	7	-7%
Asturias, Principality of	59	57	64	42	42	46	38	36	35	37	2	
Balearic Islands	82	56	63	50	60	45	50	53	60	68	8	
Canary Islands	85	72	76	47	61	48	57	62	71	67	-4	
Cantabria	25	30	28	21	14	20	18	22	21	22	1	
Castile La Mancha	234	195	172	152	140	120	107	107	118	129	9%	-6%
Castile-Leon	318	270	286	228	189	160	157	181	175	164	-6%	-7%
Catalonia	450	417	391	317	336	272	272	291	282	283	0%	-5%
Extremadura	107	95	85	76	62	47	56	54	62	62	0	-6%
Galicia	266	246	237	186	157	132	139	123	141	117	-17%	-9%
Madrid, Community of	201	194	157	138	135	130	114	111	121	125	3%	-5%
Murcia, Region of	93	88	61	71	50	57	61	44	58	85	27	
Navarre, Autonomous Community of	48	39	39	28	44	31	41	26	26	29	3	
Rioja, La	30	34	22	22	13	16	11	20	25	26	1	
Valencian Community	323	263	213	198	151	141	167	154	180	176	-2%	-7%
Basque Country	102	83	75	69	68	63	36	67	56	51	-5	-7%
Ceuta and Melilla	2	4	2	2	0	1	0	5	3	4	1	
Total	**3,100**	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1%**	**-6%**

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

Table 25. Evolution of hospitalised injured casualties by autonomous communities. Spain, 2008-2017

Autonomous communities	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Andalusia	3,119	2,362	1,972	1,864	1,553	1,615	1,345	1,281	1,453	1,372	-6%	-9%
Aragon	826	561	564	508	426	392	364	385	374	398	6%	-8%
Asturias, Principality of	298	241	227	219	220	237	254	230	232	219	-6%	-3%
Balearic Islands	432	310	286	304	311	374	340	389	344	389	13%	-1%
Canary Islands	426	393	331	289	292	300	362	347	391	413	6%	0%
Cantabria	158	126	111	79	68	97	56	57	67	68	1	-9%
Castile La Mancha	1,096	761	771	633	518	443	365	377	425	375	-12%	-11%
Castile-Leon	1,592	1,363	1,116	1,060	924	746	657	738	736	658	-11%	-9%
Catalonia	2,119	2,011	1,955	1,829	1,938	1,867	1,851	1,876	1,800	1,678	-7%	-3%
Extremadura	383	352	278	307	277	209	208	155	194	195	1%	-7%
Galicia	1,170	980	1,035	822	806	679	697	733	764	691	-10%	-6%
Madrid, Community of	1,421	1,446	1,318	1,373	1,299	1,386	1,416	1,314	1,254	1,304	4%	-1%
Murcia, Region of	459	321	230	242	159	162	173	219	241	233	-3%	-7%
Navarre, Autonomous Community of	82	100	110	98	86	102	92	112	136	124	-9%	42
Rioja, La	113	76	77	75	71	69	66	71	60	77	17	-4%
Valencian Community	2,138	1,890	1,091	1,176	1,056	950	919	786	865	864	0%	-10%
Basque Country	624	585	488	438	404	428	387	391	389	452	16%	-4%
Ceuta and Melilla	32	45	35	31	36	30	22	34	30	36	6	4
Total	**16,488**	**13,923**	**11,995**	**11,347**	**10,444**	**10,086**	**9,574**	**9,495**	**9,755**	**9,546**	**-2%**	**-6%**

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

In 2017 the number of fatalities compared to 2016 increased in 27 provinces and decreased in 22. Palencia recorded the same number of fatalities as in 2016. The Autonomous City of Ceuta recorded the same number of fatalities in both 2016 and 2017, whereas the Autonomous City of Melilla recorded 1 more fatality. The fatality trend in figures at provincial level is subject to fluctuations as they are small figures.

Table 26 Evolution of fatalities by provinces on interurban and urban roads. Spain, 2013-2017

Provinces	2013	2014	2015	2016	2017	Variation 2017/2016[1]	Variation 2017/2013[1]
Araba/Álava	17	5	10	13	11	-2	-6
Albacete	19	23	22	24	16	-8	-3
Alicante/Alacant	42	67	62	68	64	-4	22
Almería	30	19	26	40	22	-18	-8
Ávila	19	12	16	12	11	-1	-8
Badajoz	25	40	37	38	36	-2	11
Balearic Islands	45	50	53	60	68	8	23
Barcelona	141	159	128	131	145	11%	3%
Burgos	36	24	32	36	31	-5	-5
Cáceres	22	16	17	24	26	2	4
Cádiz	37	41	32	41	34	-7	-3
Castellón/Castelló	22	29	28	43	39	-4	17
Ciudad Real	38	19	27	30	33	3	-5
Córdoba	36	37	26	22	37	15	1
Coruña, A	73	55	47	58	51	-7	-22
Cuenca	30	17	16	15	18	3	-12
Girona	47	27	41	55	47	-8	0
Granada	33	49	43	27	33	6	0
Guadalajara	8	14	11	7	12	5	4
Gipuzkoa	24	16	38	17	27	10	3
Huelva	26	19	23	19	22	3	-4
Huesca	22	24	17	21	25	4	3
Jaén	24	30	23	31	35	4	11
León	26	32	39	25	22	-3	-4
Lleida	42	37	51	37	40	3	-2
Rioja, La	16	11	20	25	26	1	10
Lugo	14	33	22	32	22	-10	8
Madrid	130	114	111	121	125	3%	-4%
Málaga	49	40	46	57	67	10	18
Murcia	57	61	44	58	85	27	28
Navarra	31	41	26	26	29	3	-2
Ourense	14	18	11	15	13	-2	-1
Asturias	46	38	36	35	37	2	-9
Palencia	15	12	6	13	13	0	-2
Palmas, Las	25	31	22	40	30	-10	5
Pontevedra	31	33	43	36	31	-5	0
Salamanca	12	13	17	10	15	5	3
S.C.Tenerife	23	26	40	31	37	6	14
Cantabria	20	18	22	21	22	1	2
Segovia	8	19	16	16	10	-6	2
Sevilla	48	52	43	66	55	-11	7
Soria	9	14	10	19	11	-8	2
Tarragona	42	49	71	59	51	-8	9
Teruel	6	14	16	9	18	9	12
Toledo	25	34	31	42	50	8	25
Valencia/València	77	71	64	69	73	4	-4
Valladolid	22	13	24	24	27	3	5
Bizkaia	22	15	19	26	13	-13	-9
Zamora	13	18	21	20	24	4	11
Zaragoza	40	39	38	43	37	-6	-3
Ceuta	1	0	3	2	2	0	1
Melilla	0	0	2	1	2	1	2
Total	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1%**	**9%**

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

As it can be seen in the chart below, for 2017 the national fatality rate per million inhabitants has been 39, noting that 17 provinces have a rate below the national rate, 21 provinces have a rate over the national rate within the interval of a standard deviation and 12 provinces exceed the national rate in a standard deviation.

Figure 7. Fatality rate per million population disaggregated by province where the accident occurred. Spain, 2017

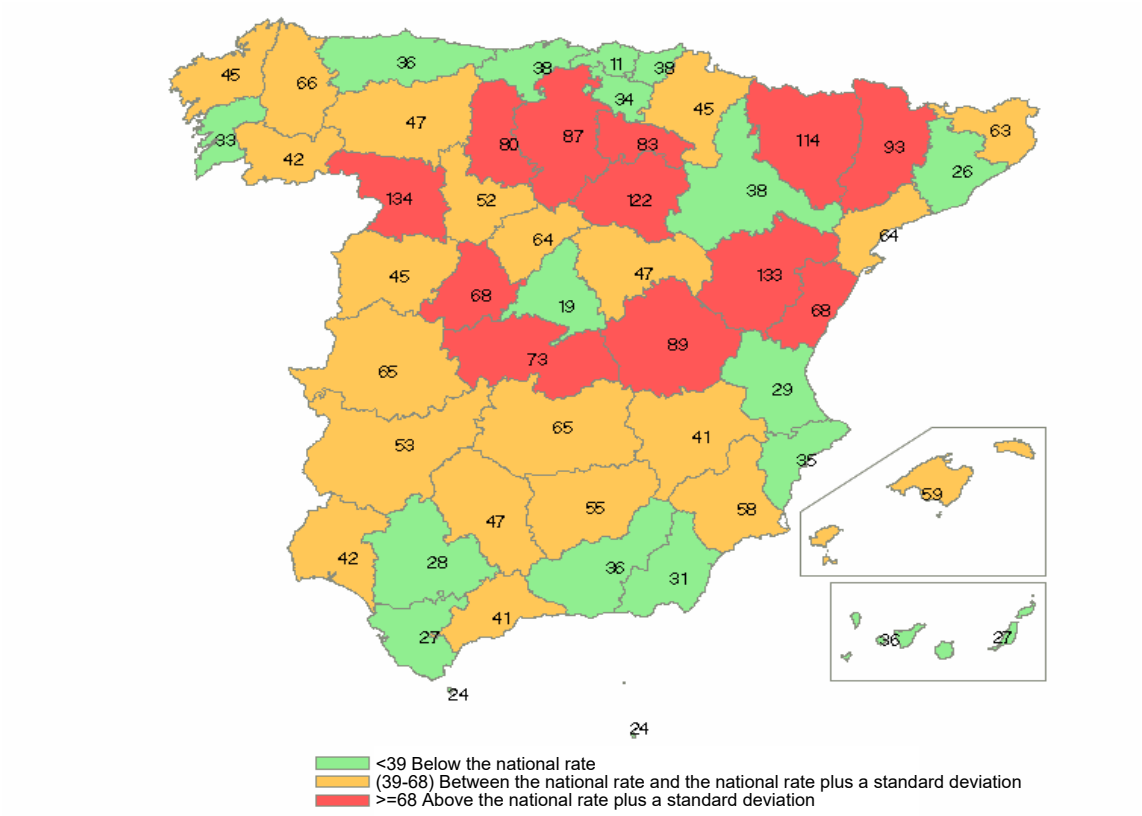


Table 27. Evolution of hospitalised injured casualties by provinces, on interurban and urban roads. Spain, 2013-2017

Provinces	2013	2014	2015	2016	2017	Variation 2017/2016[1]	Variation 2017/2013[1]
Araba/Álava	86	80	84	63	118	55	32
Albacete	87	101	83	95	99	4	12
Alicante/Alacant	341	268	287	291	297	2%	-13%
Almería	121	94	111	108	137	27%	13%
Ávila	71	71	66	60	39	-21	-32
Badajoz	144	147	105	139	139	0%	-3%
Balearic Islands	374	340	389	344	389	13%	4%
Barcelona	1,158	1172	1145	1102	1036	-6%	-11%
Burgos	150	123	140	149	120	-19%	-20%
Cáceres	65	61	50	55	56	1	-9
Cádiz	217	202	229	211	224	6%	3%
Castellón/Castelló	116	92	97	141	118	-16%	2%
Ciudad Real	93	79	61	77	63	-14	-30
Córdoba	199	151	118	151	115	-24%	-42%
Coruña, A	238	226	234	304	312	3%	31%
Cuenca	69	44	57	74	64	-10	-5
Girona	258	261	278	273	225	-18%	-13%
Granada	219	181	172	196	169	-14%	-23%
Guadalajara	52	24	48	40	42	2	-10
Gipuzkoa	174	202	199	203	186	-8%	7%
Huelva	70	67	80	92	116	24	46
Huesca	111	108	111	104	108	4%	-3%
Jaén	114	119	92	114	81	-29%	-29%
León	132	100	170	189	167	-12%	27%
Lleida	218	194	209	188	201	7%	-8%
Rioja, La	69	66	71	60	77	17	8
Lugo	129	100	141	114	107	-6%	-17%
Madrid	1,386	1416	1314	1254	1304	4%	-6%
Málaga	356	265	237	252	222	-12%	-38%
Murcia	162	173	219	241	233	-3%	44%
Navarra	102	92	112	136	124	-9%	22%
Ourense	85	88	83	86	91	5	6
Asturias	237	254	230	232	219	-6%	-8%
Palencia	60	58	49	50	37	-13	-23
Palmas, Las	79	131	145	130	115	-12%	36
Pontevedra	227	283	275	260	181	-30%	-20%
Salamanca	87	103	88	74	61	-13	-26
S.C. Tenerife	221	231	202	261	298	14%	35%
Cantabria	97	56	57	67	68	1	-29
Segovia	54	38	46	38	41	3	-13
Sevilla	319	266	242	329	308	-6%	-3%
Soria	26	21	31	41	25	-16	-1
Tarragona	233	224	244	237	216	-9%	-7%
Teruel	36	53	45	61	64	3	28
Toledo	142	117	128	139	107	-23%	-25%
Valencia/València	493	559	402	433	449	4%	-9%
Valladolid	102	105	104	92	116	24	14%
Bizkaia	168	105	108	123	148	20%	-12%
Zamora	64	38	44	43	52	9	-12
Zaragoza	245	203	229	209	226	8%	-8%
Ceuta	9	6	15	16	22	6	13
Melilla	21	16	19	14	14	0	-7
Total	**10,086**	**9,574**	**9,495**	**9,755**	**9,546**	**-2%**	**-5%**

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

4 The temporal component in casualty accidents

Months of the year

2017 resulted in a monthly average of 152 deaths, ranging from 122 deaths in January to 193 in October. July and August recorded 334 fatalities, a figure which accounts for 18% of the annual total fatalities. As compared with the previous year, there were decreases only in 6 months: January, February, March, May, July and August, whereas the other 6 months of the year 2017 recorded increases as against 2016.

Table 28. Fatalities by month of year. Spain, 2008-2017

Months	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
January	265	222	197	159	147	131	113	119	147	122	-17%	-8%
February	235	208	148	142	141	137	99	113	136	131	-4%	-6%
March	241	233	174	142	154	124	132	113	153	140	-8%	-6%
April	247	201	172	156	144	124	141	116	132	141	7%	-6%
May	265	237	211	185	157	105	123	157	132	130	-2%	-8%
June	261	244	202	148	174	138	153	129	145	169	17%	-5%
July	311	259	251	222	161	163	153	174	191	182	-5%	-6%
August	302	274	258	216	190	171	156	164	188	152	-19%	-7%
September	229	205	221	186	202	159	162	178	155	163	5%	-4%
October	268	223	242	169	147	154	143	130	141	193	37%	-4%
November	241	193	206	173	135	130	158	150	146	157	8%	-5%
December	235	215	196	162	151	144	155	146	144	150	4%	-5%
Total	**3,100**	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1%**	**-6%**
Monthly average	258	226	207	172	159	140	141	141	151	152		

Days of the week

32% of the reported fatalities were recorded in accidents happening on Saturday and Sunday, therefore the majority of fatalities occurred from Monday to Friday. Wednesday and Thursday were the days of the week recording fewer fatalities throughout the year (219 and 247 respectively).

Table 29. Fatalities by day of week. Spain, 2008-2017

Days of week	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
Monday	411	347	323	282	238	226	234	244	265	259	-2%	-5%
Tuesday	379	312	303	252	238	220	206	215	215	255	19%	-4%
Wednesday	374	342	313	280	246	187	205	209	243	219	-10%	-6%
Thursday	401	354	337	248	253	263	224	186	250	247	-1%	-5%
Friday	466	384	374	287	273	259	245	255	261	267	2%	-6%
Saturday	522	489	418	341	341	264	290	300	294	271	-8%	-7%
Sunday	547	486	410	370	314	261	284	280	282	312	11%	-6%
Total	**3,100**	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1%**	**-6%**

Hour of day

In 2017, 63% of the reported road fatalities occurred within the time frame between 08:00 and 19:59. As compared with 2016, the number of road fatalities occurring during the slot 08:00 – 19:59 decreased by 1% and during the slot 20:00 – 07:59 increased by 4%.

Table 30. Fatalities by time slot. Spain, 2008-2017

Time slots	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
08:00 – 19:59 h	1,911	1,663	1,509	1,253	1,203	1,101	1,056	1,093	1,158	1,151	-1%	-5%
20:00 – 07:59 h	1,189	1,051	969	807	700	579	632	596	652	679	4%	-6%
Total	**3,100**	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1%**	**-6%**

If the combination of time slot and day of the week is analysed, the highest number of road fatalities is recorded in accidents occurring between 07:00 and 23:59 from Monday to Friday.

Table 31. Road fatalities and injured casualties by time slot and day of week. Spain, 2017

Time slots	Fatalities	Hospitalised injured casualties	Non-hospitalised injured casualties
Monday to Friday, 07:00 – 23:59 h	1,044	5,817	89,374
Saturday, Sunday and public holiday, 7.00 - 23.59 h	500	2,668	30,671
07:00 – 23:59 h	**1,544**	**8,485**	**120,045**
Tuesday to Friday, 24:00 – 06:59 h	110	412	3,813
Saturday, Sunday and public holiday, 24:00 – 06:59 h	176	649	5,758
24:00 – 06:59 h	**286**	**1,061**	**9,571**

5 Types of casualty accidents

Running-off-the-road was the most commonly reported type of fatal accident in 2017, with 33% of all deaths, followed by accidents involving a pedestrian and head-on collisions with 18%.

Table 32. Road fatalities by type of accident. Spain, 2008-2017

Type of Accident	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Run-off-road collision	1,062	903	752	646	663	508	548	522	601	601	0%	-6%
Head-on collision	472	370	350	336	250	222	225	209	277	327	18%	-4%
Side and T-bone collision	616	471	428	329	282	246	204	190	253	259	2%	-9%
Rear and multiple collision	246	223	227	191	165	153	145	169	145	144	-1%	-6%
Pedestrian collision*	450	459	449	367	355	349	310	306	386	338	-12%	-3%
Overturning	62	70	66	47	47	30	17	16	22	20	-2	-42
Other type of accidents	192	218	206	144	141	172	239	277	126	141	12%	-3%
Total	**3,100**	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1%**	**-6%**

** The number of people being killed when struck by a vehicle does not include all pedestrians hit by a vehicle because the classification by type of accident is made according to the first manoeuvre and not to its harmful outcome.*

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

Given the different types of accidents on interurban and urban roads, both areas are analysed separately.

On interurban roads, 39% of fatalities and 36% of hospitalised injured casualties occurred in run-off-road collisions. As compared to 2016, the number of people being killed when struck by a vehicle decreased by 26% whereas the number of hospitalised injured casualties resulting from that type of accident decreased by 6%. As for run-off-road collisions, the number of fatalities decreased by 1% and the number of hospitalised injured casualties by 9%. The number of fatalities resulting from head-on collisions increased by 20% whereas the number of hospitalised injured casualties resulting from that type of accident decreased by 6%.

On urban roads, 47% of fatalities and 35% of hospitalised injured casualties were pedestrians being struck by a vehicle and this was the most frequent type of accident. As for fatalities, the second

most frequent type of accident was run-off-road (16%), whereas for hospitalised injured casualties the second most frequent types of accident were side and T-bone collisions (28%). As compared to 2016, the number of people being killed when struck by a vehicle has decreased by 6% and the number of hospitalised injured casualties by 2%.

Table 33. Road fatalities by type of accident. Interurban roads. Spain, 2008-2017

Type of Accident	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Run-off-road collision	975	834	690	578	594	441	476	464	524	519	-1%	-7%
Head-on collision	443	342	335	322	232	214	208	195	254	306	20%	-4%
Side and T-bone collision	464	371	341	254	223	184	153	140	183	179	-2%	-10%
Rear and multiple collision	208	179	197	163	136	132	122	136	114	126	11%	-5%
Pedestrian collision*	210	191	179	150	132	135	118	97	133	99	-26%	-8%
Overturning	41	55	48	38	30	26	11	12	17	16	-1	-25
Other type of accidents	125	158	138	98	95	98	159	204	66	76	10	-5%
Total	**2,466**	**2,130**	**1,928**	**1,603**	**1,442**	**1,230**	**1,247**	**1,248**	**1,291**	**1,321**	**2%**	**-7%**

** The number of people being killed when struck by a vehicle does not include all pedestrians hit by a vehicle because the classification by type of accident is made according to the first manoeuvre and not to its harmful outcome.*

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

Table 34. Hospitalised injured casualties by type of accident. Interurban roads. Spain, 2008-2017

Type of Accident	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Run-off-road collision	4,485	3,356	2,928	2,666	2,378	1,895	1,856	1,639	1,887	1,710	-9%	-10%
Head-on collision	1,446	1,247	1,062	947	781	655	571	545	834	788	-6%	-7%
Side and T-bone collision	2,451	1,756	1,552	1,371	1,158	1,008	698	716	898	922	3%	-10%
Rear and multiple collision	1,246	993	911	806	633	647	502	518	590	531	-10%	-9%
Pedestrian collision*	424	352	348	284	277	223	229	191	230	216	-6%	-7%
Overturning	378	356	300	294	285	245	84	77	146	142	-3%	-10%
Other type of accidents	647	688	541	457	532	509	894	1,058	465	457	-2%	-18%
Total	**11,077**	**8,748**	**7,642**	**6,825**	**6,044**	**5,182**	**4,834**	**4,744**	**5,050**	**4,766**	**-6%**	**-11%**

** The number of people being killed when struck by a vehicle does not include all pedestrians hit by a vehicle because the classification by type of accident is made according to the first manoeuvre and not to its harmful outcome.*

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

Table 35 Road fatalities by type of accident. Urban roads. Spain, 2008-2017

Type of Accident	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Run-off-road collision	87	69	62	68	69	67	72	58	77	82	5	-5
Head-on collision	29	28	15	14	18	8	17	14	23	21	-2	-8
Side and T-bone collision	152	100	87	75	59	62	51	50	70	80	10	-7%
Rear and multiple collision	38	44	30	28	29	21	23	33	31	18	-13	-20
Pedestrian collision*	240	268	270	217	223	214	192	209	253	239	-6%	0%
Overturning	21	15	18	9	17	4	6	4	5	4	-1	-17
Other type of accidents	67	60	68	46	46	74	80	73	60	65	5	-2
Total	**634**	**584**	**550**	**457**	**461**	**450**	**441**	**441**	**519**	**509**	**-2%**	**-2%**

** The number of people being killed when struck by a vehicle does not include all pedestrians hit by a vehicle because the classification by type of accident is made according to the first manoeuvre and not to its harmful outcome.*
[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

Table 36. Hospitalised injured casualties by type of accident. Urban roads. Spain, 2008-2017

Type of Accident	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Run-off-road collision	383	343	291	285	257	275	266	325	300	305	2%	-2%
Head-on collision	212	139	124	101	144	132	134	150	131	128	-2%	-5%
Side and T-bone collision	1,888	1,742	1,270	1,330	1,233	1,308	1,259	1,187	1,343	1,351	1%	-4%
Rear and multiple collision	585	602	450	493	482	534	515	489	438	500	14%	-2%
Pedestrian collision*	1,659	1,586	1,591	1,603	1,563	1,670	1,557	1,633	1,727	1,690	-2%	0%
Overturning	185	201	161	195	176	189	113	87	114	109	-4%	-6%
Other type of accidents	499	562	466	515	545	796	896	880	652	697	7%	4%
Total	**5,411**	**5,175**	**4,353**	**4,522**	**4,400**	**4,904**	**4,740**	**4,751**	**4,705**	**4,780**	**2%**	**1%**

** The number of people being killed when struck by a vehicle does not include all pedestrians hit by a vehicle because the classification by type of accident is made according to the first manoeuvre and not to its harmful outcome.*
[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 1.

6 Road casualties

Gender and age

In 2017, there were 1,403 male fatalities and 424 female fatalities in road traffic accidents, therefore male casualties accounted for 55% of all fatalities and female casualties for 23%. The proportion by gender is similar on both interurban —78% males and 21% females— and urban roads — 72% males and 28% females—. Fatality rate per million population by gender was at 61 for males and at 18 for females.

As for hospitalised injured casualties, 70% were males, recording a higher percentage on interurban roads —73%— than on urban roads —67%—. As regards non-hospitalised injured casualties, 59% were males; there were practically no differences between interurban and urban roads.

Table 37. Road fatalities and injured casualties by gender. Spain, 2017

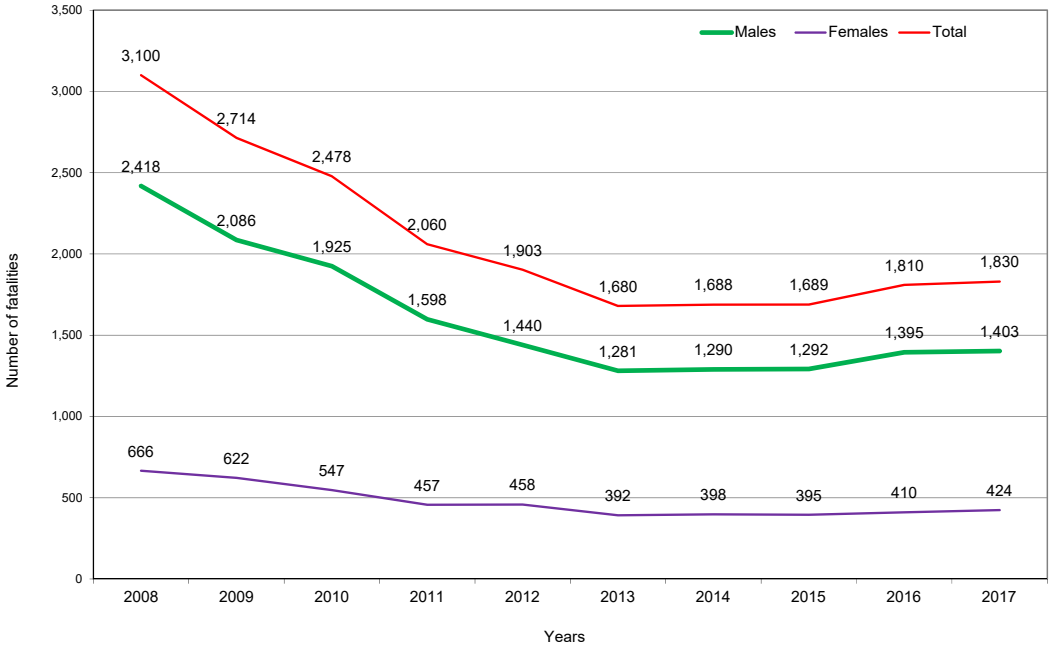
Gender	Total						
	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties		Total fatalities per million population
	Number	% Dist.	Number	% Dist.	Number	% Dist.	
Male	1,403	77%	6,708	70%	75,886	59%	61
Female	424	23%	2,806	29%	52,843	41%	18
Unspecified	3	0%	32	0%	887	1%	
Total	**1,830**	**100%**	**9,546**	**100%**	**129,616**	**100%**	**39**

Gender	Interurban roads					
	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	% Dist.	Number	% Dist.	Number	% Dist.
Male	1,036	78%	3,500	73%	30,529	58%
Female	282	21%	1,263	27%	21,710	41%
Unspecified	3	0%	3	0%	101	0%
Total	**1,321**	**100%**	**4,766**	**100%**	**52,340**	**100%**

Gender	Urban roads					
	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	% Dist.	Number	% Dist.	Number	% Dist.
Male	367	72%	3,208	67%	45,357	59%
Female	142	28%	1,543	32%	31,133	40%
Unspecified	0	0%	29	1%	786	1%
Total	**509**	**100%**	**4,780**	**100%**	**77,276**	**100%**

In 2017 the number of males being killed in road traffic accidents increased by 1% as against the previous year; females increased by 3%. Over the past 10 years, the male-female fatality ratio was 3.3, that is, for every woman being killed in a road traffic accident, 3.3 men are killed.

Figure 8. Evolution of fatalities by gender. Spain, 2008-2017



In 2017, in absolute terms and considering the population as a whole, the 25-34 age group has a significantly higher number of people killed in road traffic accidents with 293 fatalities. The 45-54 age group, for its part, accounts for the greatest number of hospitalised injured casualties —1,705—.

Considering the percentage distribution of fatalities and hospitalised injured casualties by age group, 54% of fatalities and 45% of hospitalised injured casualties were 45 years of age or above.

On interurban roads, the age group with the highest record was for 25-34 years, with 241 fatalities. If hospitalised injured casualties are taken into account, the age group with the highest record was for 45-54 years, with 930 hospitalised casualties.

On urban roads, the age group resulting in the highest record road death figure was the 75-84 age group with 108 fatalities. If hospitalised injured casualties are taken into account, the age group with the highest incidence was for 25-34 years, with 814 hospitalised casualties. 55% of the fatalities and 29% of the hospitalised injured casualties recorded on urban roads were aged 55 or over.

The average age of the fatalities from road traffic accidents occurring on urban roads (57) is higher than the average age of those recorded on interurban roads (46), whereas the average age in the case of hospitalised injured casualties is similar in both road types. The average age of hospitalised injured casualties was 44 on urban roads and 43 on interurban roads; the average age of non-hospitalised injured casualties was 38 on urban roads and 39 on interurban roads.

Taking into account the fatality rate per million population, the 85 and over age group recorded the highest rate at 63 fatalities per million population, followed by the 75-84 age group, at 62. The 25-34 age group ranks third, with 53 fatalities per million population. In 2017 children (aged 14 or under) presented a rate of 5 fatalities per million population.

Table 38. Fatalities by age group. Spain, 2017

Age groups	Total						
	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties		Total fatalities per million population
	Number	% Dist.	Number	% Dist.	Number	% Dist.	
0-14 years	35	2%	346	4%	6,611	5%	5
15-24 years	200	11%	1,398	15%	22,094	17%	45
25-34 years	293	16%	1,657	17%	27,444	21%	53
35-44 years	289	16%	1,702	18%	26,363	20%	38
45-54 years	291	16%	1,705	18%	20,091	16%	40
55-64 years	246	13%	1,138	12%	12,113	9%	42
65-74 years	191	10%	771	8%	6,552	5%	43
75-84 years	185	10%	518	5%	3,658	3%	62
85 and over	89	5%	180	2%	1,016	1%	63
Unspecified	11	1%	131	1%	3,674	3%	
Total	**1,830**	**100%**	**9,546**	**100%**	**129,616**	**100%**	**39**
Average age	49		43		39		

Age groups	Interurban roads					
	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	% Dist.	Number	% Dist.	Number	% Dist.
0-14 years	22	2%	134	3%	2,542	5%
15-24 years	158	12%	711	15%	8,731	17%
25-34 years	241	18%	843	18%	10,696	20%
35-44 years	234	18%	922	19%	11,108	21%
45-54 years	232	18%	930	20%	8,413	16%
55-64 years	194	15%	591	12%	5,241	10%
65-74 years	121	9%	380	8%	2,970	6%
75-84 years	77	6%	190	4%	1,462	3%
85 and over	36	3%	36	1%	296	1%
Unspecified	6	0%	29	1%	881	2%
Total	**1,321**	**100%**	**4,766**	**100%**	**52,340**	**100%**
Average age	46		43		39	

Age groups	Urban roads					
	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	% Dist.	Number	% Dist.	Number	% Dist.
0-14 years	13	3%	212	4%	4,069	5%
15-24 years	42	8%	687	14%	13,363	17%
25-34 years	52	10%	814	17%	16,748	22%
35-44 years	55	11%	780	16%	15,255	20%
45-54 years	59	12%	775	16%	11,678	15%
55-64 years	52	10%	547	11%	6,872	9%
65-74 years	70	14%	391	8%	3,582	5%
75-84 years	108	21%	328	7%	2,196	3%
85 and over	53	10%	144	3%	720	1%
Unspecified	5	1%	102	2%	2,793	4%
Total	**509**	**100%**	**4,780**	**100%**	**77,276**	**100%**
Average age	57		44		38	

As regards the number of fatalities by age group and in comparison with 2016, decreases have been observed in the 45-54, 65-74, 75-84 and 85 and over age groups. The remaining age group show increases, especially the 25-34 age group with an increase by 31% —70 more fatalities—, the 0-14 age group with 7 more fatalities and the 55-64 age group with an increase by 7% —16 more fatalities—.

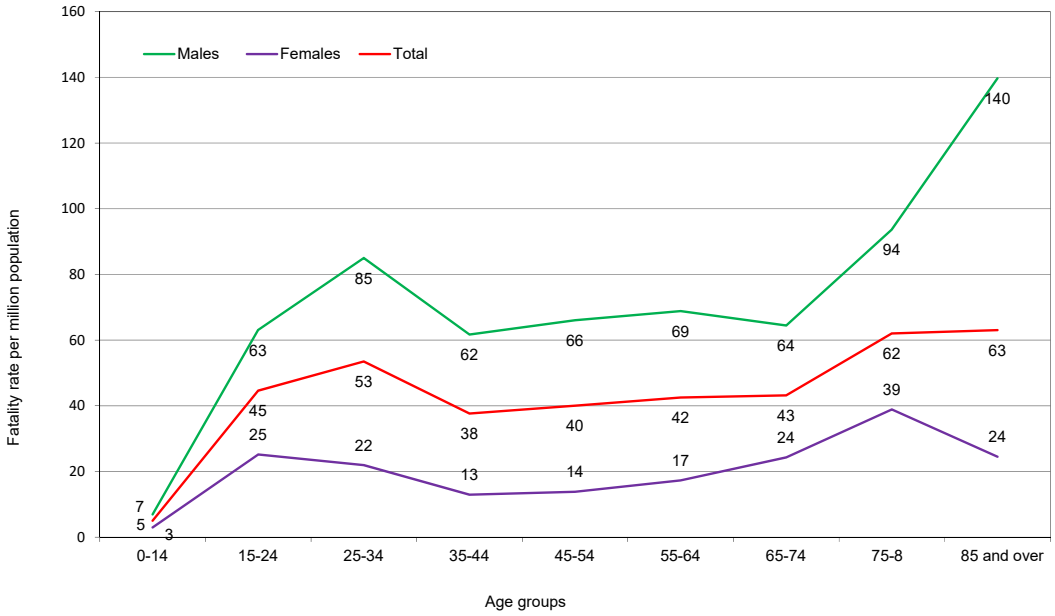
Table 39. Evolution of road traffic fatalities by age group. Spain, 2008-2017

Age groups	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
0-14 years	84	60	79	42	52	46	37	25	28	35	7	-49
15-24 years	561	434	363	263	206	163	154	170	198	200	1%	-11%
25-34 years	644	572	453	333	298	242	211	236	223	293	31%	-8%
35-44 years	512	490	442	378	350	278	277	271	289	289	0%	-6%
45-54 years	403	368	346	313	274	250	298	262	311	291	-6%	-4%
55-64 years	292	256	248	229	200	202	216	210	230	246	7%	-2%
65-74 years	245	230	240	200	196	200	188	202	198	191	-4%	-3%
75-84 years	245	201	211	210	236	206	204	229	210	185	-12%	-3%
85 and over	61	70	78	74	75	76	85	74	105	89	-15%	28
Unspecified	53	33	18	18	16	17	18	10	18	11	-7	-42
Total	**3,100**	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1%**	**-6%**

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

The chart below shows the differences found in the fatality rates per population by age and gender. Males register the highest rate in all age groups, the differences are largest with females in the 35-44 age group, in which the rate for males is nearly five times as high as that among females, and in the 85 and over age group, in which the rate for males is six times as high as that among females. From 15 to 74 years of age, the rate for males is relatively stable, showing an increase from the age of 75 years onwards. As regards females, a distribution with the lowest rates is found in the 25 to 64 years of age group, leading to an increase from the age of 65 years onwards.

Figure 9. Fatality rate by age and gender per million inhabitants. Spain, 2017



Drivers

A total of 175,130 drivers were involved in road traffic accidents in 2017, of which 62% occurred on urban roads. 73% of the drivers were males (males account for 58% of the total registered drivers), 65% of drivers were below 45 years of age and the majority of them were driving a car (62%).

A total of 1,171 drivers were killed in road traffic accidents in 2017; these drivers account for 64% of the total fatalities. 89% of the driver fatalities were males, 57% of them were below 45 years of age and 47% were driving a car. In addition, 81% of the drivers have been killed in accidents occurring on an interurban road.

63% of the hospitalised injured casualties in 2017 were drivers, namely 5,992. In the case of hospitalised injured casualties, drivers were mainly males — 86% —; below 45 years of age — 47%—; motorcycle riders — 41% — and car drivers — 29% —. In addition, 56% of the hospitalised drivers were injured in accidents occurring on interurban roads.

Table 40. Drivers involved in casualty accidents, fatalities, hospitalised and non-hospitalised injured casualties by accident location. Spain, 2017

Type of road	Drivers involved		Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
Interurban roads	65,750	38%	947	81%	3,366	56%	34,189	41%
Urban roads	109,380	62%	224	19%	2,626	44%	48,933	59%
Total	**175,130**	**100%**	**1,171**	**100%**	**5,992**	**100%**	**83,122**	**100%**

Table 41. Drivers involved in casualty accidents, fatalities, hospitalised and non-hospitalised injured casualties by gender. Spain, 2017

Gender	Drivers involved		Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
Males	127,388	73%	1,043	89%	5,138	86%	57,735	69%
Females	45,565	26%	127	11%	842	14%	24,940	30%
Unknown	2,177	1%	1	0%	12	0%	447	1%
Total	**175,130**	**100%**	**1,171**	**100%**	**5,992**	**100%**	**83,122**	**100%**

Table 42. Drivers involved in casualty accidents, fatalities, hospitalised and non-hospitalised injured casualties by age group. Spain, 2017

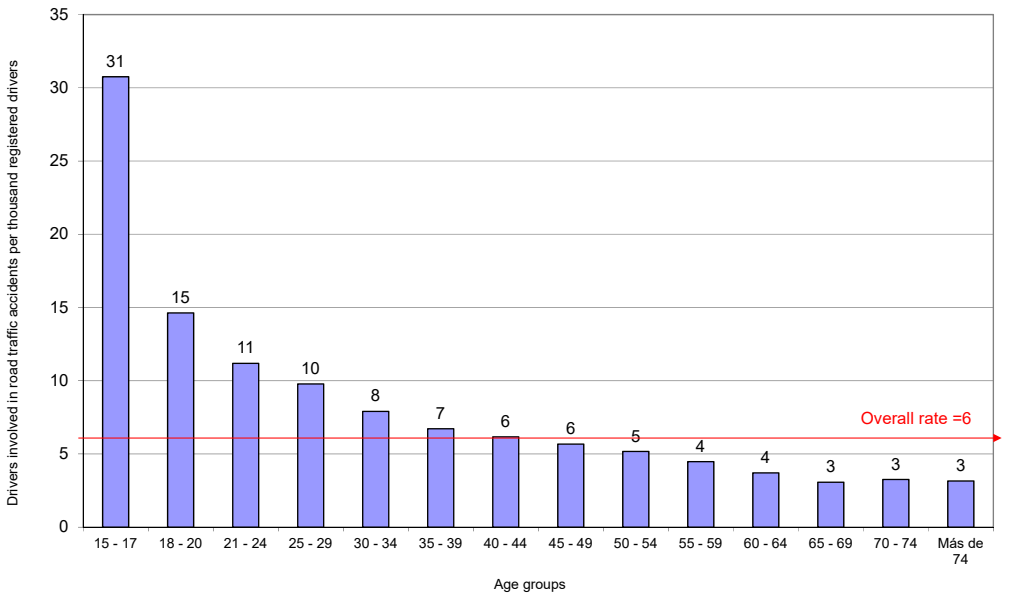
Age	Drivers involved		Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
0-14 years	429	0%	5	0%	29	0%	338	0%
15-24 years	22,726	13%	99	8%	857	14%	13,000	16%
25-34 years	38,458	22%	227	19%	1,269	21%	20,426	25%
35-44 years	42,603	24%	234	20%	1,307	22%	20,138	24%
45-54 years	33,742	19%	231	20%	1,267	21%	14,713	18%
55-64 years	19,241	11%	179	15%	713	12%	7,913	10%
65-74 years	8,880	5%	108	9%	336	6%	3,360	4%
Over 74 years	4,350	2%	84	7%	172	3%	1,627	2%
Unspecified	4,701	3%	4	0%	42	1%	1,607	2%
Total	**175,130**	**100%**	**1,171**	**100%**	**5,992**	**100%**	**83,122**	**100%**

Table 43. Drivers involved in casualty accidents, fatalities, hospitalised and non-hospitalised injured casualties by vehicle type. Spain, 2017

Vehicle type	Drivers involved		Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
Bicycle	8,577	5%	78	7%	692	12%	7,011	8%
Moped	7,621	4%	47	4%	545	9%	6,518	8%
Motorcycle	28,103	16%	336	29%	2,581	43%	23,147	28%
Car	109,027	62%	555	47%	1,748	29%	41,029	49%
Goods Vehicle	17,226	10%	123	11%	315	5%	4,767	6%
Bus or coach	2,181	1%	0	0%	3	0%	121	0%
Other vehicles	2,395	1%	32	3%	108	2%	529	1%
Total	**175,130**	**100%**	**1,171**	**100%**	**5,992**	**100%**	**83,122**	**100%**

The rate of drivers involved in an accident per thousand registered drivers in 2017 was at 6. By age group, it can be observed that rates decrease as the age of drivers increases and drivers below the age of 39 show rates higher than that of the total. Riders aged 15-17 show the highest rate, being at 31 per thousand registered drivers.

Figure 10. Rate of drivers involved in casualty accidents per thousand registered drivers. Spain, 2017



On interurban roads the number of drivers killed in an accident in 2017 has increased by 9% as compared to 2016, whereas there has been a decrease by 5% on urban roads. As regards hospitalised

injured drivers, there has been a decrease by 5% in 2017 as compared to 2016; the number of hospitalised injured drivers has increased by 1% both on interurban and urban roads.

Table 44. Evolution of driver fatalities. Interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
Interurban roads	1,626	1,433	1,278	1,099	977	805	836	884	865	947	9%	-6%
Urban roads	303	259	233	193	185	209	207	164	236	224	-5%	-3%
Total	**1,929**	**1,692**	**1,511**	**1,292**	**1,162**	**1,014**	**1,043**	**1,048**	**1,101**	**1,171**	**6%**	**-5%**

Table 45. Evolution of hospitalised injured drivers. Interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
Interurban roads	7,529	5,905	5,161	4,730	4,190	3,685	3,345	3,383	3,551	3,366	-5%	-9%
Urban roads	3,117	2,952	2,257	2,459	2,384	2,669	2,669	2,569	2,607	2,626	1%	-2%
Total	**10,646**	**8,857**	**7,418**	**7,189**	**6,574**	**6,354**	**6,014**	**5,952**	**6,158**	**5,992**	**-3%**	**-6%**

Pedestrians

In 2017, 351 pedestrians were killed in road traffic accidents, accounting for 19% of total fatalities; 1,940 were hospitalised injured casualties, i.e. 20% of total hospitalised injured casualties; and 12,382 were non-hospitalised injured casualties, i.e. 9.6% of the corresponding total. On interurban roads a total of 103 pedestrians were killed, accounting for 29% of pedestrian fatalities; there were 223 hospitalised injured pedestrians, accounting for 11% of the total. On urban roads a total of 248 pedestrians were killed, accounting for 71% of all pedestrian fatalities; there were 13,507 injured pedestrians, of which 1,717 were admitted to hospital.

Table 46. Pedestrian fatalities, hospitalised and non-hospitalised injured pedestrians. Interurban and urban roads. Spain, 2017

Type of road	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
Interurban roads	103	29%	223	11%	592	5%
Urban roads	248	71%	1,717	89%	11,790	95%
Total	**351**	**100%**	**1,940**	**100%**	**12,382**	**100%**

As regards the gender of pedestrian fatalities, males represented the greatest percentage —61%—, whereas in the case of hospitalised and non-hospitalised injured pedestrians, females accounted for a greatest percentage —51% and 54% respectively—.

Table 47. Pedestrian fatalities, hospitalised and non-hospitalised injured pedestrians by gender. Interurban and urban roads. Spain, 2017

Gender	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
Males	215	61%	936	48%	5,614	45%
Females	135	38%	993	51%	6,640	54%
Unknown	1	0%	11	1%	128	1%
Total	**351**	**100%**	**1,940**	**100%**	**12,382**	**100%**

In 2017 on interurban roads 103 pedestrians were killed, of whom 20 were over 74 years of age — 19% —; the 45-54 age group recorded the same figure. As for hospitalised injured pedestrians, the 45-54 age group showed the greatest percentage — 17% —. On urban roads 248 pedestrians were killed, 52% of them were over 74 years of age and 19% of the pedestrians were in the 65-74 age group. As for hospitalised injured pedestrians, 23% of them were over 74 years of age and 15% of the pedestrians were in the 65-74 age group.

Table 48. Pedestrian fatalities, hospitalised and non-hospitalised injured pedestrians by age group: Interurban Roads. Spain, 2017

Age	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
From 0 to 14 y	1	1%	17	8%	56	9%
From 15 to 24 y	14	14%	27	12%	78	13%
From 25 to 34 y	9	9%	19	9%	75	13%
From 35 to 44 y	14	14%	28	13%	89	15%
From 45 to 54 y	20	19%	39	17%	75	13%
From 55 to 64 y	13	13%	31	14%	76	13%
From 65 to 74 y	9	9%	35	16%	59	10%
75 y and over	20	19%	26	12%	71	12%
Unknown	3	3%	1	0%	13	2%
Total	**103**	**100%**	**223**	**100%**	**592**	**100%**

Table 49. Pedestrian fatalities, hospitalised and non-hospitalised injured pedestrians by age group: Urban Roads. Spain, 2017

Age	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
From 0 to 14 y	8	3%	169	10%	1,647	14%
From 15 to 24 y	7	3%	141	8%	1,425	12%
From 25 to 34 y	6	2%	111	6%	1,154	10%
From 35 to 44 y	11	4%	139	8%	1,336	11%
From 45 to 54 y	15	6%	213	12%	1,439	12%
From 55 to 64 y	22	9%	240	14%	1,377	12%
From 65 to 74 y	47	19%	265	15%	1,299	11%
75 y and over	129	52%	387	23%	1,598	14%
Unknown	3	1%	52	3%	515	4%
Total	**248**	**100%**	**1,717**	**100%**	**11,790**	**100%**

In comparison with 2016, the number of pedestrian fatalities has decreased by 25% on interurban roads and by 2% on urban roads. As regards hospitalised injured pedestrians, in 2017 there has been a decrease by 17% on interurban roads and the number has remained stable on urban roads.

Table 50. Evolution of pedestrian fatalities. Interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
Interurban roads	236	201	193	158	144	154	132	120	137	103	-25%	-9%
Urban roads	266	269	278	222	232	224	204	247	252	248	-2%	-1%
Total	**502**	**470**	**471**	**380**	**376**	**378**	**336**	**367**	**389**	**351**	**-10%**	**-4%**

Table 51. Evolution of hospitalised injured pedestrians. Interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
Interurban roads	428	368	373	300	317	278	253	236	270	223	-17%	-7%
Urban roads	1,634	1,585	1,586	1,616	1,599	1,775	1,649	1,763	1,719	1,717	0%	1%
Total	**2,062**	**1,953**	**1,959**	**1,916**	**1,916**	**2,053**	**1,902**	**1,999**	**1,989**	**1,940**	**-2%**	**-1%**

7 Vehicles involved in casualty accidents

Cars are the most commonly involved vehicle type in road traffic accidents. According to the information provided by police forces, there is at least one car involved in four out of five casualty accidents, a ratio that has remained roughly constant over the last decade. Among the vehicles with an increasing involvement, we should highlight motorcycles since in 2008 they were involved in 19% of the accidents and in 2017 in 27% as well as bicycles, which were involved in 8% of the accidents in 2017 as against 3% in 2008. On the contrary, the percentage of accidents with at least one moped involved has dropped from 15% to 7% over that same period.

Table 52. Evolution of the distribution of casualty accidents by vehicle type (% of accidents involving at least a vehicle of the listed type). Spain, 2008-2017

Vehicle type	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bicycle	3%	4%	4%	5%	6%	7%	8%	7%	7%	8%
Moped	15%	13%	11%	10%	9%	8%	8%	8%	8%	7%
Motorcycle	19%	20%	21%	22%	22%	22%	24%	25%	25%	27%
Car	79%	79%	80%	80%	80%	80%	77%	77%	77%	77%
Goods vehicle	17%	15%	15%	14%	14%	13%	16%	16%	15%	16%
Bus or coach	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

Note: More than one vehicle of the same type and more than one type of vehicle may be involved in an accident.

Comparing data from the preceding year, it can be observed that in 2017 there have been decreases in the number of pedestrian fatalities (38 individuals), bus occupants (18 individuals), moped users (5 individuals) and occupants of other vehicles (3 individuals). In the remaining modes of transport, the number of fatalities has increased, especially in the case of cars (45 individuals), motorcycles (16 individuals), goods vehicles (12 individuals) and bicycles (11 individuals).

Table 53. Evolution of road traffic fatalities by age group. Spain, 2008-2017

Vehicle type	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Bicycle	54	56	67	49	72	69	75	58	67	78	11	24
Moped	183	156	100	74	66	54	53	56	54	49	-5	-14%
Motorcycle	495	438	386	348	302	301	287	329	343	359	4%	-4%
Car	1,501	1,263	1,197	977	872	715	722	693	754	799	6%	-7%
Goods vehicle	263	239	185	172	147	111	160	152	143	155	8%	-6%
Bus or coach	27	21	4	3	3	11	26	2	21	3	-18	-24
Other vehicles	75	71	68	57	65	41	29	32	39	36	-3	-39
Pedestrians	502	470	471	380	376	378	336	367	389	351	-11%	-4%
Total fatalities	**3,100**	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1%**	**-6%**

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

On interurban roads, cars are the vehicle type causing more fatalities — 717 in 2017 —, followed by 251 motorcycle fatalities and 103 pedestrian fatalities. In comparison with 2016, there has been a significant increase in the number of car fatalities (43 individuals), van fatalities (18 individuals), motorcycle fatalities (17 individuals) and pedal cyclist fatalities (9 individuals). The most significant decreases have been found in pedestrians (34 individuals), bus or coach users (16 individuals) and trucks not exceeding 3,500kg (9 individuals).

On urban roads, pedestrians are the group recording the highest number of fatalities — 248 in 2017—, followed by 108 motorcycle fatalities and 82 car fatalities. In comparison with 2016, there has been a significant increase in the number of pedal cyclist fatalities (2 individuals), car fatalities (2 individuals) and van fatalities (3 individuals). There has been a decrease in the number of moped user fatalities (5 individuals), pedestrian fatalities (4 individuals), trucks exceeding 3,500kg (3 individuals), bus or coach fatalities (2 individuals) and motorcycle fatalities (1 individual).

In light of the above and, as illustrated by the following two charts, cars, bicycles and vans are the only modes of transport showing an increase in the number of fatalities as compared to the previous year, both on urban and interurban roads. Pedestrians and buses or coaches are the modes of transport with a decrease in the number of fatalities, both on urban and interurban roads, as compared to 2016.

Figure 11. Fatalities by mode of transport on interurban roads. Spain, 2016-2017

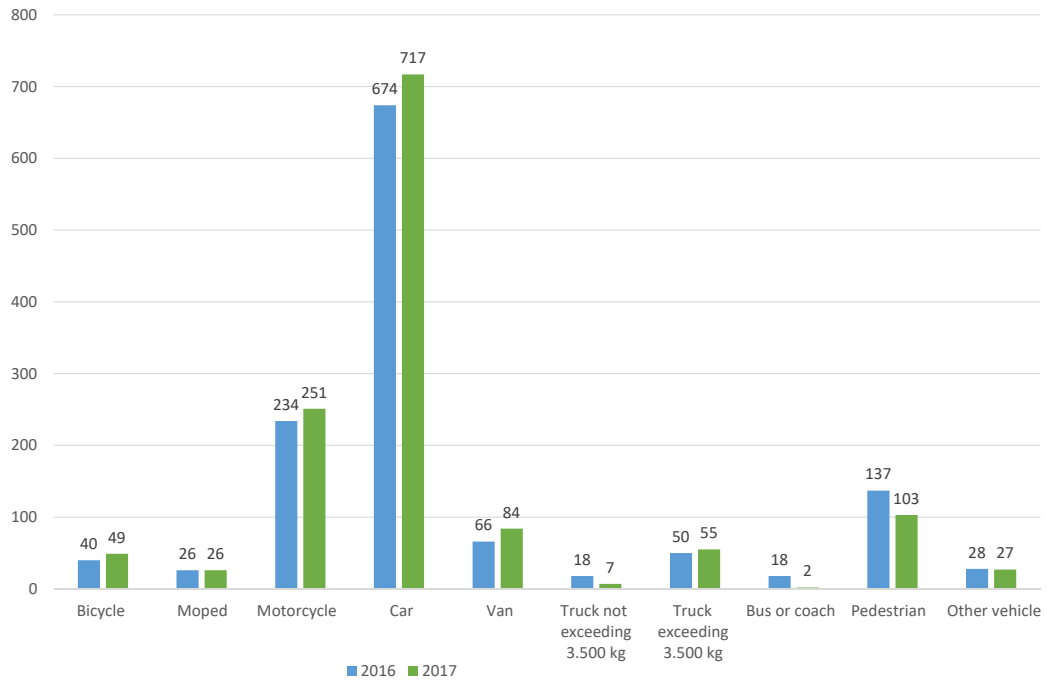
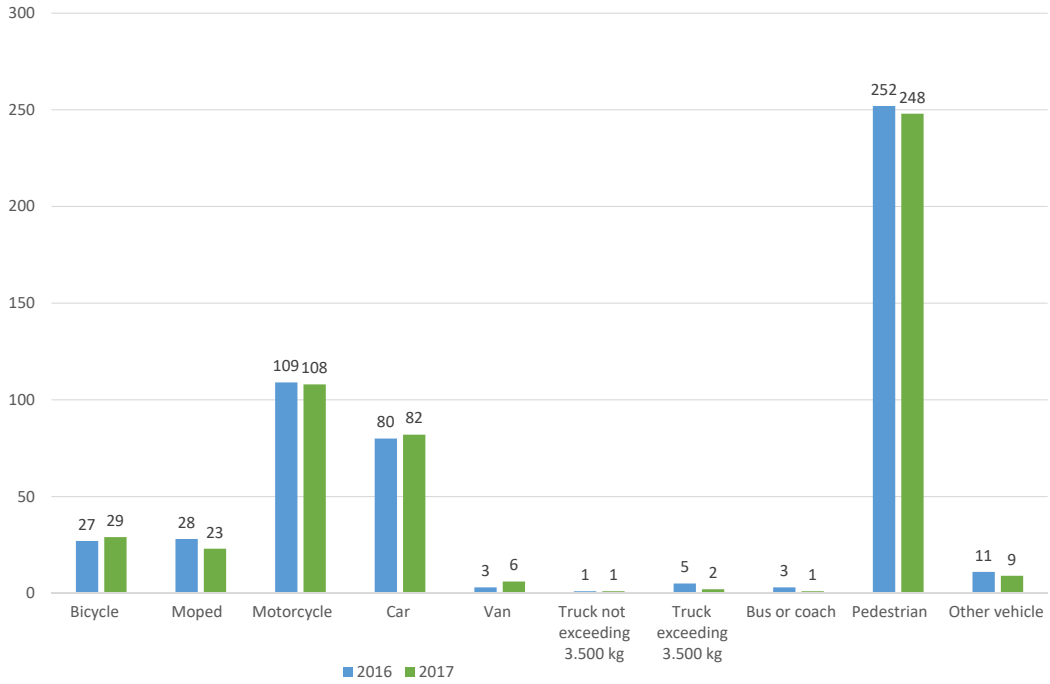


Figure 12. Fatalities by mode of transport on urban roads. Spain, 2016-2017



In comparison with the previous year, in 2017 there have been widespread decreases in the number of hospitalised injured casualties: car occupants (124 individuals), pedestrians (46 individuals), pedal cyclists (42 individuals), bus or coach users (36 individuals), goods vehicles (21 individuals) and moped users (7 individuals). Motorcyclists are the only road user group recording an increase (103 individuals).

Table 54. Evolution of hospitalised injured casualties by vehicle type. Spain, 2008-2017

Vehicle type	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Bicycle	440	489	467	589	572	646	670	652	736	694	-6%	5%
Moped	2,023	1,464	1,014	958	771	818	638	669	625	618	-1%	-12%
Motorcycle	3,097	3,032	2,528	2,617	2,458	2,510	2,583	2,599	2,681	2,784	4%	-1%
Car	7,121	5,682	4,981	4,374	3,921	3,326	2,993	2,831	2,988	2,864	-4%	-10%
Goods vehicle	1,302	880	714	667	538	477	549	551	479	458	-5%	-11%
Bus or coach	91	123	77	65	43	74	124	49	83	47	-36	-44
Other vehicles	352	300	255	161	225	182	115	145	174	141	-23%	-9%
Pedestrians	2,062	1,953	1,959	1,916	1,916	2,053	1,902	1,999	1,989	1,940	-3%	-1%
Total hospitalised injured casualties	**16,488**	**13,923**	**11,995**	**11,347**	**10,444**	**10,086**	**9,574**	**9,495**	**9,755**	**9,546**	**-2%**	**-6%**

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

On interurban roads, in 2017 the greatest number of hospitalised injured casualties occurred in cars: 2,295 individuals were injured and required hospitalisation. Motorcyclists are the second group recording the highest number of hospitalised injured casualties with 1,214 individuals. In comparison with 2016 there has been an increase in the number of hospitalised injured motorcycle users (36 individuals). For the rest of road user groups, the decreases were as follows: car users — 161 individuals —; pedestrians — 53 individuals —; bus or coach — 45 individuals —; pedal cyclists — 18 individuals —; trucks exceeding 3,500kg — 14 individuals —; trucks not exceeding 3,500kg — 9 individuals —; vans — 4 individuals —; moped users — 1 individual —.

On urban roads, pedestrians are the road user group recording the highest number of hospitalised injured casualties —1,717 in 2017—, followed by motorcyclists — 1,534 —. In comparison with 2016, there has been an increase in the number of hospitalised injured motorcycle users (67 individuals), car occupants (37 individuals), van occupants (18 individuals) and bus or coach occupants (9 individuals). However, falls have been recorded in comparison with the previous year in the number of hospitalised injured pedal cyclists (24 individuals), in trucks exceeding 3,500kg (7 individuals), in moped users (6 individuals), trucks not exceeding 3,500kg (5 individuals) and pedestrians (2 individuals).

In light of the above and, as illustrated by the following two charts, motorcycles have been the only mode of transport showing an increase in the number of hospitalised injured casualties as compared to the previous year, both on urban and interurban roads. Pedal cycles, mopeds, trucks of any maximum authorised mass and pedestrians are the only modes of transport showing a decrease in the number of hospitalised injured casualties in comparison to the previous year, both on urban and interurban roads.

Figure 13. Hospitalised injured casualties by mode of transport on interurban roads. Spain, 2016-2017

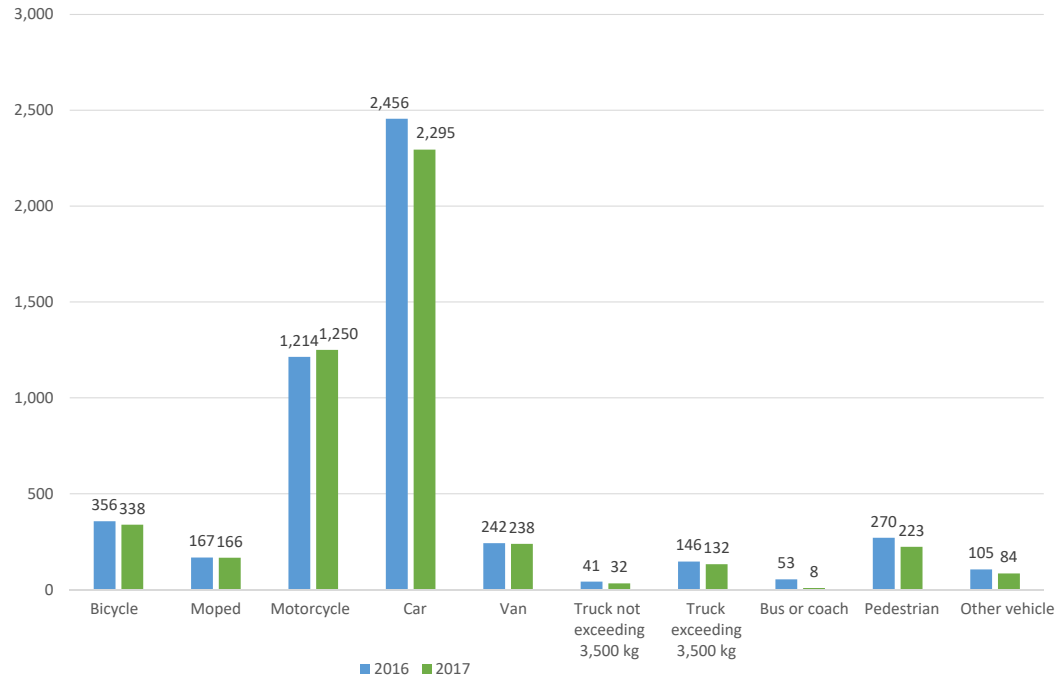
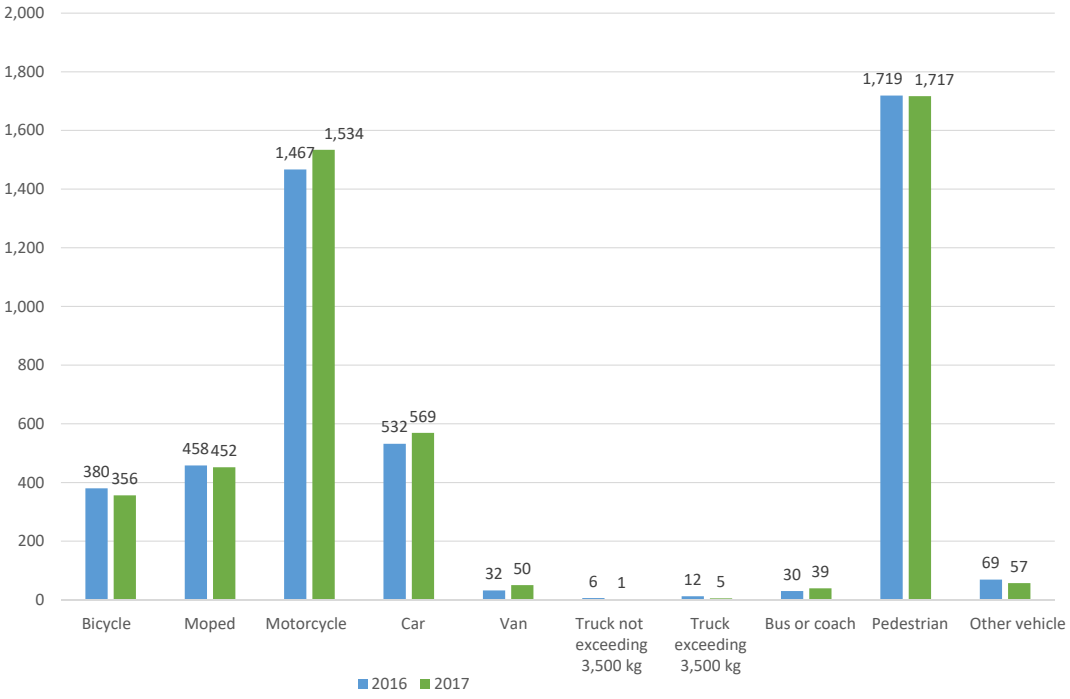


Figure 14. Hospitalised injured casualties by mode of transport on urban roads. Spain, 2016-2017



Pedal cyclists

In 2017 pedal cyclists were involved in 8,065 accidents in which 78 cyclists were killed, 694 were hospitalised injured casualties and 7,035 were non-hospitalised injured casualties. These accidents happened mostly on urban roads (72%), where the majority of non-hospitalised injured cyclists also occurred, i.e. 71%. However, the greatest number of pedal cyclist fatalities occurred on interurban roads, resulting in 49 deaths; on urban roads there were 29 deaths.

Males are, by far, the group who have mainly suffered the consequences of road traffic accidents involving a bicycle: 73 out of the 78 pedal cyclist fatalities were males, as it was the case for 87% of the hospitalised injured casualties and 82% of non-hospitalised injured casualties.

In 2017, the 65-74 age group records the highest pedal cyclist fatality figure (17), followed by the 75+ age group (13) and the 45-64 age group (12). As for hospitalised injured casualties, the age groups showing the highest number of casualties in this category were the 45-54 age group (22%) and the 35-44 age group (20%).

In 2017 there were 11 more pedal cyclist fatalities than in 2016 distributed as follows: 9 more cyclists on interurban roads and 2 more on urban roads. As regards hospitalised injured pedal cyclists, there has been a decrease by 50%.

Table 55. Road traffic casualty accidents involving a pedal cycle on urban and interurban roads. Spain, 2017

Type of road	Casualty accidents		Fatalities*	Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	Number	%	Number	%
Interurban roads	2,257	28%	49	338	49%	2,074	29%
Urban roads	5,808	72%	29	356	51%	5,001	71%
Total	**8,065**	**100%**	**78**	**694**	**100%**	**7,075**	**100%**

* *The percentage distribution is not shown, as the total number of fatalities is below 100.*

Table 56. Cyclist fatalities and injured casualties by gender. Spain, 2017

Gender	Fatalities*	Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	Number	%	Number	%
Males	73	601	87%	5,799	82%
Females	5	89	13%	1,203	17%
Unspecified		4	1%	73	1%
Total	**78**	**694**	**100%**	**7,075**	**100%**

* *The percentage distribution is not shown, as the total number of fatalities is below 100.*

Table 57. Cyclist fatalities and injured casualties by age group. Spain, 2017

Age group	Fatalities*	Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	Number	%	Number	%
0-14 years	4	27	4%	357	5%
15-24 years	3	92	13%	1,159	16%
25-34 years	7	76	11%	1,202	17%
35-44 years	9	142	20%	1,493	21%
45-54 years	12	154	22%	1,146	16%
55-64 years	12	95	14%	753	11%
65-74 years	17	63	9%	388	5%
75 and over	13	30	4%	133	2%
Unspecified	1	15	2%	444	6%
Total	**78**	**694**	**100%**	**7,075**	**100%**

** The percentage distribution is not shown, as the total number of fatalities is below 100.*

Table 58 Evolution of cyclist fatalities on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016
Interurban roads	43	43	49	37	53	45	54	48	40	49	9
Urban roads	11	13	18	12	19	24	21	10	27	29	2
Total	**54**	**56**	**67**	**49**	**72**	**69**	**75**	**58**	**67**	**78**	**11**

Table 59. Evolution of hospitalised injured cyclists on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
Interurban roads	235	268	258	304	304	297	312	322	356	338	-5%	4%
Urban roads	205	221	209	285	268	349	358	330	380	356	-6%	6%
Total	440	489	467	589	572	646	670	652	736	694	-6%	5%

Moped users

In 2017 the number of casualty accidents involving a moped was 7,574, accounting for 7% of the total, that is a similar proportion to the figure corresponding to mopeds in the 2017 vehicle fleet. The majority of accidents involving a moped occurred on urban roads: 6,599 accidents, accounting

for 87% of them, and reporting the highest number of hospitalised and non-hospitalised injured casualties (73% and 88% respectively). Fatalities show a fairly even distribution, 26 on interurban and 23 on urban roads.

Males represent a majority of the casualties among moped users: 46 out of the 49 moped fatalities were males, as it was the case for 77% of the hospitalised injured casualties and 70% of non-hospitalised injured casualties. The 15-24 age group had the highest number of hospitalised and non-hospitalised injured casualties involving a moped. There were 10 moped deaths in this age group and the highest record moped death figure (11) was in the 75+ age group.

In 2017 there were fewer moped user fatalities (5) and fewer hospitalised injured casualties (-7%) than in 2016 and all of them occurred on urban roads. There was a decrease by 1% in the number of hospitalised injured casualties occurring on interurban roads as well as a decrease by 1% on urban roads as compared with the previous year.

Table 60. Road traffic casualty accidents involving a moped on urban and interurban roads. Spain, 2017

Type of road	Casualty accidents		Fatalities*	Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	Number	%	Number	%
Interurban roads	975	13%	26	166	27%	909	12%
Urban roads	6,599	87%	23	452	73%	6,426	88%
Total	**7,574**	**100%**	**49**	**618**	**100%**	**7,335**	**100%**

* *The percentage distribution is not shown, as the total number of fatalities is below 100.*

Table 61. Moped fatalities and injured casualties by gender. Spain, 2017

Gender	Fatalities*	Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	Number	%	Number	%
Males	46	478	77%	5,103	70%
Females	3	139	22%	2,195	30%
Unspecified		1	0%	37	1%
Total	**49**	**618**	**100%**	**7,335**	**100%**

* *The percentage distribution is not shown, as the total number of fatalities is below 100.*

Table 62. Moped fatalities and injured casualties by age group. Spain, 2017

Age group	Fatalities*	Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	Number	%	Number	%
0-14 years	0	7	1%	65	1%
15-24 years	10	235	38%	3,074	42%
25-34 years	4	112	18%	1,547	21%
35-44 years	1	84	14%	1,014	14%
45-54 years	10	69	11%	748	10%
55-64 years	4	62	10%	417	6%
65-74 years	9	29	5%	196	3%
75 and over	11	13	2%	116	2%
Unspecified		7	1%	158	2%
Total	**49**	**618**	**100%**	**7,335**	**100%**

** The percentage distribution is not shown, as the total number of fatalities is below 100.*

Table 63. Evolution of moped fatalities on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016
Interurban roads	105	88	54	37	42	34	21	28	26	26	0
Urban roads	78	68	46	37	24	20	32	28	28	23	-5
Total	**183**	**156**	**100**	**74**	**66**	**54**	**53**	**56**	**54**	**49**	-5

Table 64. Evolution of hospitalised injured moped users on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
Interurban roads	873	605	406	374	279	267	156	198	167	166	-1%	-17%
Urban roads	1,150	859	608	584	492	551	482	471	458	452	-1%	-10%
Total	**2,023**	**1,464**	**1,014**	**958**	**771**	**818**	**638**	**669**	**625**	**618**	**-1%**	**-12%**

Motorcyclists

In 2017 motorcycle users represented 27% of the total casualty accidents, i.e they were involved in 27,165 accidents whereas the percentage of motorcycles in the vehicle fleet was 10%. 75% of the casualty accidents involving motorcycles occurred on urban roads where 55% of hospitalised and 77% of non-hospitalised injured motorcyclists happened.

Meanwhile, fatal injuries occurred more frequently on interurban roads: 70% of motorcyclist fatalities occurred on this type of road.

Motorcyclist casualties were mostly male: 93% were killed, 88% were hospitalised and 79% were non-hospitalised injured casualties. As regards the age of motorcyclists, the 25-34, 35-44 and 45-54 age groups are the groups with a greater presence, accumulating 69% of fatalities and 73% of the hospitalised and 74% of the non-hospitalised injured casualties, respectively.

In 2017 there has been an increase by 7% in the number of motorcyclist fatalities on interurban roads, with a 3% rise in the number of hospitalised injured casualties as compared to 2016. There has been 1 fewer motorcyclist death on urban roads and a 5% rise in the number of hospitalised injured casualties as against the previous year.

Table 65. Road traffic casualty accidents involving a motorcycle on urban and interurban roads. Spain, 2017

Type of road	Casualty accidents		Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
Interurban roads	6,783	25%	251	70%	1,250	45%	5,963	23%
Urban roads	20,382	75%	108	30%	1,534	55%	19,588	77%
Total	**27,165**	**100%**	**359**	**100%**	**2,784**	**100%**	**25,551**	**100%**

Table 66. Motorcyclist fatalities and injured casualties by gender. Spain, 2017

Gender	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
Males	335	93%	2,451	88%	20,063	79%
Females	24	7%	323	12%	5,266	21%
Unspecified		0%	10	0%	222	1%
Total	**359**	**100%**	**2,784**	**100%**	**25,551**	**100%**

Table 67. Motorcyclist fatalities and injured casualties by age group. Spain, 2017

Age group	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
0-14 years	0	0%	7	0%	132	1%
15-24 years	36	10%	321	12%	3,584	14%
25-34 years	76	21%	703	25%	7,184	28%
35-44 years	93	26%	676	24%	6,274	25%
45-54 years	79	22%	659	24%	4,989	20%
55-64 years	63	18%	314	11%	2,354	9%
65-74 years	10	3%	67	2%	506	2%
75 and over	2	1%	12	0%	72	0%
Unspecified	0	0%	25	1%	456	2%
Total	**359**	**100%**	**2,784**	**100%**	**25,551**	**100%**

Table 68. Evolution of motorcyclist fatalities on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Interurban roads	359	325	279	251	208	203	188	247	234	251	7%	-4%
Urban roads	136	113	107	97	94	98	99	82	109	108	-1	-3%
Total	**495**	**438**	**386**	**348**	**302**	**301**	**287**	**329**	**343**	**359**	**5%**	**-4%**

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

Table 69. Evolution of hospitalised injured motorcyclists on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
Interurban roads	1,783	1,619	1,431	1,377	1,252	1,152	1,125	1,180	1,214	1,250	3%	-4%
Urban roads	1,314	1,413	1,097	1,240	1,206	1,358	1,458	1,419	1,467	1,534	5%	2%
Total	**3,097**	**3,032**	**2,528**	**2,617**	**2,458**	**2,510**	**2,583**	**2,599**	**2,681**	**2,784**	**4%**	**-1%**

Car users

Car users were involved in 78,221 casualty accidents, that is, in 77% of the accidents recorded in 2017; cars account for 68% in the Spanish vehicle fleet. Of the 1,830 road traffic deaths that occurred in 2017, 43% (799 fatalities) were travelling in a car, either as drivers or passengers. As for the 9,546 hospitalised injured casualties as a result of a road traffic accident, 30% (2,864) were car occupants and of the 129,616 non-hospitalised injured casualties, 47% (67,388) were travelling in this type of vehicle.

63% of the casualty accidents involving at least one car occurred on urban roads; however, 90% (717 individuals) of car fatalities, 80% of hospitalised injured casualties and 55% of non-hospitalised injured casualties occurred on interurban roads.

72% of car occupants killed were males, a percentage that dropped to 61% in the case of hospitalised injured casualties and to 49% in the case of non-hospitalised injured casualties. The 25-34 age group — 21% — and the 15-24 and 35-44 age groups registered the highest fatality rate (16% each) for cars. The 25-34 age group registered the highest number of hospitalised injured casualties (19%) and non-hospitalised injured casualties (22%).

Car fatalities increased by 7% on interurban roads in 2017 as compared to 2016; as for hospitalised injured casualties, there was a decrease by 7% on this type of road. On urban roads, the number of car fatalities rose from 80 to 82 and the number of hospitalised injured casualties increased by 7%.

Table 70. Road traffic casualty accidents involving cars on urban and interurban roads. Spain, 2017

Type of road	Casualty accidents		Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
Interurban roads	29,190	37%	717	90%	2,295	80%	37,244	55%
Urban roads	49,031	63%	82	10%	569	20%	30,144	45%
Total	**78,221**	**100%**	**799**	**100%**	**2,864**	**100%**	**67,388**	**100%**

Table 71. Car fatalities and injured casualties by gender. Spain, 2017

Gender	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
Males	572	72%	1,745	61%	32,771	49%
Females	225	28%	1,114	39%	34,252	51%
Unspecified	2	0%	5	0%	365	1%
Total	**799**	**100%**	**2,864**	**100%**	**67,388**	**100%**

Table 72. Car fatalities and injured casualties by age group. Spain, 2017

Age group	Fatalities		Hospitalised injured casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
0-14 years	17	2%	110	4%	3,975	6%
15-24 years	125	16%	522	18%	11,868	18%
25-34 years	167	21%	552	19%	14,629	22%
35-44 years	127	16%	495	17%	13,848	21%
45-54 years	108	14%	419	15%	9,676	14%
55-64 years	94	12%	306	11%	5,936	9%
65-74 years	82	10%	254	9%	3,480	5%
75 and over	76	10%	181	6%	2,105	3%
Unspecified	3	0%	25	1%	1,871	3%
Total	**799**	**100%**	**2,864**	**100%**	**67,388**	**100%**

Table 73. Evolution of car fatalities on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Interurban roads	1,378	1,162	1,113	902	801	643	651	632	674	717	6%	-7%
Urban roads	123	101	84	75	71	72	71	61	80	82	2	-4%
Total	**1,501**	**1,263**	**1,197**	**977**	**872**	**715**	**722**	**693**	**754**	**799**	**6%**	**-7%**

1 The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

Table 74. Evolution of hospitalised injured car users on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016	Year-on-year variation 2008-2017
Interurban roads	6,208	4,791	4,320	3,691	3,236	2,595	2,341	2,238	2,456	2,295	-7%	-10%
Urban roads	913	891	661	683	685	731	652	593	532	569	7%	-5%
Total	**7,121**	**5,682**	**4,981**	**4,374**	**3,921**	**3,326**	**2,993**	**2,831**	**2,988**	**2,864**	**-4%**	**-10%**

Users of vehicles for the transport of goods and passengers

Van users

In 2017 vans were involved in 11,150 casualty accidents, of which 57% occurred on urban roads. However, the highest number of van occupants killed occurred on interurban roads: 84 of the 90 occupants killed lost their lives on this type of road. 83% of the hospitalised injured van occupants also occurred on interurban roads. As for occupants of other types of vehicles or pedestrians involved in van accidents, 109 of the 153 fatalities occurred on interurban roads.

In 2017, there were 21 more van fatalities than in 2016, whereas the number of hospitalised injured casualties increased by 5%. Fatalities rose on both types of road and hospitalised injured casualties only rose on urban roads (18 individuals) as compared to the previous year.

Table 75. Road traffic casualty accidents involving vans on interurban and urban roads. Spain, 2017

Type of road	Casualty accidents		Total fatalities		Occupant fatalities	Third-party fatalities		Hospitalised injured occupants		Non-hospitalised injured occupants	
	Number	%	Number	%	Number	Number	%	Number	%	Number	%
Interurban roads	4,786	43%	193	79%	84	109	71%	238	83%	3,511	65%
Urban roads	6,364	57%	50	21%	6	44	29%	50	17%	1,890	35%
Total	**11,150**	**100%**	**243**	**100%**	**90**	**153**	**100%**	**288**	**100%**	**5,401**	**100%**

Table 76. Evolution of van fatalities on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016
Interurban roads	152	140	101	82	81	49	95	76	66	84	18
Urban roads	6	7	3	5	2	3	5	9	3	6	3
Total	**158**	**147**	**104**	**87**	**83**	**52**	**100**	**85**	**69**	**90**	**21**

Table 77. Evolution of hospitalised injured van occupants on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Interurban roads	750	504	379	352	292	247	263	278	242	238	-2%	-12%
Urban roads	57	54	42	40	32	35	39	52	32	50	18	-7
Total	**807**	**558**	**421**	**392**	**324**	**282**	**302**	**330**	**274**	**288**	**5%**	**-11%**

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

Trucks with a MAM not exceeding 3500 kg

In 2017 trucks with a MAM not exceeding 3500 kg were involved in 1,584 casualty accidents; its incidence was similar to the accidents occurring on urban roads (50%) and on interurban roads (50%).

As regards fatalities, hospitalised and non-hospitalised injured occupants of trucks with a MAM not exceeding 3500 kg were most frequently reported in accidents occurring on interurban roads (7 fatalities, 32 hospitalised and 401 non-hospitalised injured casualties). On urban roads, there was 1 death and 1 hospitalised injured casualty. As for third-party fatalities (occupants in other vehicles involved in an accident in which there was a truck of this category involved), there were 26 fatalities on interurban roads and 6 on urban roads.

As compared to 2016, there were 11 fewer fatalities and 9 fewer hospitalised injured casualties on interurban roads in 2017; they were travelling in trucks with a MAM not exceeding 3500 kg. On urban roads and for this truck category, there was 1 death and 1 hospitalised injured casualty in 2017.

Table 78. Casualty accidents involving trucks with a MAM not exceeding 3500 kg on interurban and urban roads. Spain, 2017

Type of road	Casualty accidents		Total fatalities*	Occupant fatalities*	Third-party fatalities*	Hospitalised injured occupants*	Non-hospitalised injured occupants	
	Number	%	Number	Number	Number	Number	Number	%
Interurban roads	790	50%	33	7	26	32	401	70%
Urban roads	794	50%	7	1	6	1	168	30%
Total	**1,584**	**100%**	**40**	**8**	**32**	**33**	**569**	100%

** The percentage distribution is not shown, as the total number of fatalities is below 100.*

Table 79. Evolution of the fatalities occurring in trucks with a MAM not exceeding 3500 kg on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016
Interurban roads	21	21	11	10	12	16	11	8	18	7	-11
Urban roads	3	2	0	2	2	0	1	0	1	1	0
Total	**24**	**23**	**11**	**12**	**14**	**16**	**12**	**8**	**19**	**8**	**-11**

Table 80. Evolution of hospitalised injured casualties travelling in trucks with a MAM not exceeding 3500 kg on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016
Interurban roads	149	74	82	64	45	41	52	32	41	32	-9
Urban roads	7	13	12	7	9	5	13	4	6	1	-5
Total	**156**	**87**	**94**	**71**	**54**	**46**	**65**	**36**	**47**	**33**	**-14**

Trucks with a MAM exceeding 3500 kg

Trucks with a MAM exceeding 3500 kg were involved in 4,189 casualty accidents, occurring mainly on interurban roads (78%).

As for occupant deaths, third-party fatalities (occupants in other vehicles involved in an accident in which there was a truck of this category involved), hospitalised and non-hospitalised injured occupants, they mainly occurred on interurban roads.

In 2017, there were 2 fewer fatalities travelling in trucks with a MAM exceeding 3500 kg on interurban roads than in 2016; there was also a decrease (13% less) in the number of occupants of these trucks requiring hospitalization. On urban roads, there were 3 fewer deaths and 7 fewer hospitalised injured casualties than in 2016.

Table 81. Casualty accidents involving trucks with a MAM exceeding 3500 kg on interurban and urban roads. Spain, 2017

Type of road	Casualty accidents		Total fatalities		Occupant fatalities*	Third-party fatalities		Hospitalised injured occupants		Non-hospitalised injured occupants	
	Number	%	Number	%	Number	Number	%	Number	%	Number	%
Interurban roads	3,260	78%	278	87%	55	223	84%	132	96%	1,003	87%
Urban roads	929	22%	43	13%	2	41	16%	5	4%	155	13%
Total	**4,189**	**100%**	**321**	**100%**	**57**	**264**	**100%**	**137**	**100%**	**1,158**	**100%**

** The percentage distribution is not shown, as the total number of fatalities is below 100.*

Table 82. Evolution of the fatalities occurring in trucks with a MAM exceeding 3500 kg on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016
Interurban roads	81	69	68	71	50	42	46	58	50	55	5
Urban roads	0	0	2	2	0	1	2	1	5	2	-3
Total	**81**	**69**	**70**	**73**	**50**	**43**	**48**	**59**	**55**	**57**	2

Table 83. Evolution of the hospitalised injured casualties travelling in trucks with a MAM exceeding 3500 kg on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Interurban roads	332	229	189	198	158	143	169	175	146	132	-10%	-10%
Urban roads	7	6	10	6	2	6	13	10	12	5	-7	-2
Total	**339**	**235**	**199**	**204**	**160**	**149**	**182**	**185**	**158**	**137**	**-13%**	**-10%**

[1] *The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.*

Bus or coach users

In 2017, there were 2,202 casualty accidents in which a bus or coach was involved; 87% of them occurred on urban roads. On this type of road there were 1,914 accidents in which 19 individuals were killed (1 occupant), 39 bus or coach occupants were hospitalised injured casualties and 1,682 injured occupants did not require hospitalization.

On interurban roads, there were 288 casualty accidents in which a bus or coach was involved. 2 occupants were killed, 8 occupants required hospitalization and 289 occupants did not.

In 2017, on interurban roads, there were 16 fewer occupant fatalities and 53 fewer hospitalised injured casualties than in 2016; on urban roads there were 2 fewer occupant fatalities and 9 more hospitalised injured casualties than in 2016.

Table 84. Road traffic casualty accidents involving buses or coaches on urban and interurban roads. Spain, 2017

Type of road	Casualty accidents		Total fatalities*	Occupant fatalities*	Third-party fatalities*	Hospitalised injured occupants	Non-hospitalised injured occupants	
	Number	%	Number	Number	Number	Number	Number	%
Interurban roads	288	13%	25	2	23	8	289	15%
Urban roads	1,914	87%	19	1	18	39	1,682	85%
Total	**2,202**	**100%**	**44**	**3**	**41**	**47**	**1,971**	**100%**

* *The percentage distribution is not shown, as the total number of fatalities is below 100.*

Table 85. Evolution of bus or coach fatalities on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016
Interurban roads	26	20	2	3	1	10	23	2	18	2	-16
Urban roads	1	1	2	0	2	1	3	0	3	1	-2
Total	**27**	**21**	**4**	**3**	**3**	**11**	**26**	**2**	**21**	**3**	**-18**

Table 86. Evolution of hospitalised injured bus or coach occupants on interurban and urban roads. Spain, 2008-2017

Type of road	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Variation 2017/2016
Interurban roads	61	75	25	23	12	28	91	3	53	8	-53
Urban roads	30	48	52	42	31	46	33	46	30	39	9
Total	**91**	**123**	**77**	**65**	**43**	**74**	**124**	**49**	**83**	**47**	**-44**

8 Other contributory factors

General distribution of contributory factors

Road traffic accidents are events with a multicausal nature, which are hardly ever the result of a single cause. Besides, we must add that the very concept of cause admits several meanings and classifications in scientific and technical literature. This complexity leads to consider contributory factors involved in an accident, understood as all those factors related to individuals, vehicles and roads which may have played a role in the accident occurring or in aggravating its consequences. One or several contributory factors can be present in an accident, whose identification may in many instances depend on the thoroughness of the investigation conducted by law enforcement officers.

At present, the classification of the contributory factors used by law enforcement officers is laid down in Order INT/2223/2014, of 27 October, which regulates the reporting of information to the National Register for Road Traffic Accident Victims. The data collected on contributory factors in accidents occurring on interurban roads are analysed in this section. Only those factors related to the individuals involved in the accidents are taken into account.

Firstly, the presence of the three main contributory factors —distraction, inappropriate speed and alcohol— to accidents resulting in fatalities and casualties occurring on interurban and urban roads is analysed. As this table shows, distraction was reported as a contributory factor in 33% of fatal accidents; speeding in 29%; and alcohol in 26%.

Table 87. Distribution of contributory factors in casualty and fatal accidents occurring on interurban and urban roads. Year 2017. (Catalonia and Basque Country excluded)

CONTRIBUTORY FACTOR	CASUALTY ACCIDENTS		FATAL ACCIDENTS	
	CASES	% OF TOTAL ACCIDENTS	CASES	% OF TOTAL ACCIDENTS
INATTENTIVE OR DISTRACTED DRIVING	19,658	28%	397	33%
INAPPROPRIATE SPEED	6,507	9%	345	29%
ALCOHOL	2,797 (out of 22,091)	13%	218 (out of 856)	26%

Note: The actual total number of casualty accidents is 70,458 and of fatal accidents is 1,202. Several factors may be present in a single accident.
* As regards alcohol, the sample considered is 22,091 casualty accidents and a sample of 856 fatal accidents, in which all drivers involved were submitted to test. When at least one of the tests has a positive result, alcohol is reported as a contributory factor.

On interurban roads it is possible to conduct a more accurate study of the contributory factors. As for casualty accidents, the most common factors identified in police reports are distraction (29%), failure to keep a safe distance (19%), inappropriate speed (18%), failure to respect the right of way (15%) and alcohol (10%). As regards fatal accidents, the most common factors are distraction (37%), inappropriate speed (31%) and alcohol (26%).

The role played by some of these contributory factors is further analysed in the sections below.

Table 88. Distribution of contributory factors in casualty and fatal accidents occurring on interurban roads. Year 2017. (Catalonia and Basque Country excluded)

CONTRIBUTORY FACTOR	CASUALTY ACCIDENTS		FATAL ACCIDENTS	
	CASES	% OF TOTAL ACCIDENTS	CASES	% OF TOTAL ACCIDENTS
Inattentive or distracted driving	7,634	29%	330	37%
Inappropriate speed	4,902	18%	281	31%
Alcohol*	1,677 (out of 16,213)	10%	167 (out of 645)	26%
Other infringement	1,683	6%	176	20%
Tiredness or sleepiness	2,351	9%	136	15%
Failure to yield/right of way	3,968	15%	58	6%
Sudden appearance of pedestrian	234	1%	54	6%
Improper overtaking	624	2%	40	4%
Failure to keep safety distance	5,167	19%	27	3%
Illness	539	2%	18	2%
Improper turn	715	3%	14	2%
Negligent driving	239	1%	11	1%
Inexperienced driver	318	1%	5	1%
Reckless driving	109	1%	13	1%

Note: The actual total number of casualty accidents is 26,526 and of fatal accidents is 895. Several factors may be present in a single accident.
** As regards alcohol, the sample considered is 16,213 casualty accidents and a sample of 645 fatal accidents in which all drivers involved were submitted to test. When at least one of the tests has a positive result, alcohol is reported as a contributory factor. A similar analysis is not performed for drugs due to the sample size.*

Distraction[1]

In 2017 distraction was reported as a contributory factor in 28% of casualty accidents and in 33% of fatal accidents. On interurban roads, distraction was reported as a contributory factor in 37% of fatal accidents; on urban roads, the percentage was 27%.

Inappropriate speed, according to the assessment by the law enforcement officer at the time of the accident, was reported as a contributory factor in 9% of casualty accidents in 2017 and this

[1] *In order to ensure the comparability of data, accidents occurring in Catalonia and the Basque Country have been excluded from the sample. Please refer to the first section in the chapter.*

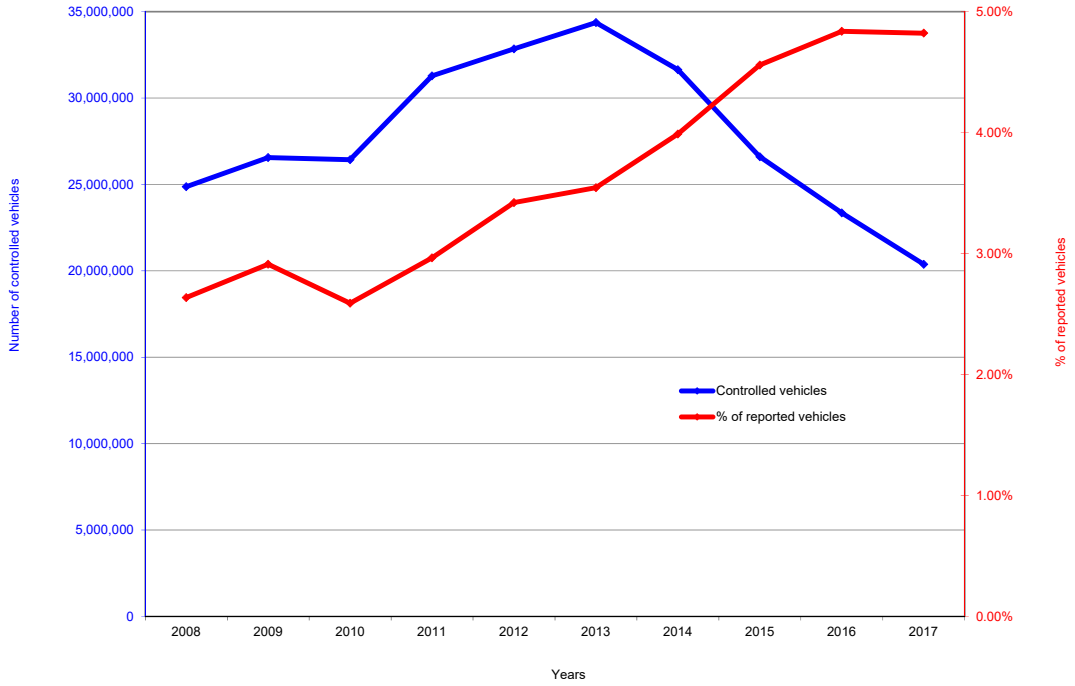
percentage increases up to 18% when the casualty accident occurs on an interurban road, as analysed in the first section in this chapter. It was noted that speed was a contributory factor in 29% of fatal accidents.

In 2017 the total number of traffic offences reported by DGT was 4,383,550. Of which, 66% were speed-related. These traffic offences were detected by the Traffic Division by the Guardia Civil and by fixed safety and point-to-point speed cameras and helicopters.

Speed[2]

In 2017 the Traffic Division of the Guardia Civil[3] performed speed controls to 20.4 million vehicles, with an outcome of 982,563 vehicles being reported. As compared with 2016, around 3 million fewer vehicles have been controlled and the percentage of reported vehicles has remained at 4.8%. Taking 2014 as the reference year, the number of controlled vehicles has decreased by 11 millions, whereas the percentage of reported vehicles has increased by 0.8 percentage points. This shows that a more selective surveillance effort has been made.

Figure 15. Number of controls performed by the Traffic Division of the Guardia Civil. Years 2008-2017



[2] *In order to ensure the comparability of data, accidents occurring in Catalonia and the Basque Country have been excluded from the sample. The reference to inappropriate speed includes those accidents in which a speed-related offence was selected as an influencing factor in the chain of events contributing to the occurrence and severity of an accident and also those cases in which inappropriate speed was selected as the determining factor of the accident (prior to the year 2014 it was only possible to select inappropriate speed as a contributory factor in the accident). In any event, it will be the view of the law enforcement officer at the scene.*

[3] *Their activity excludes public roads on the Basque Country and Catalonia as well as Municipalities with their own local police forces.*

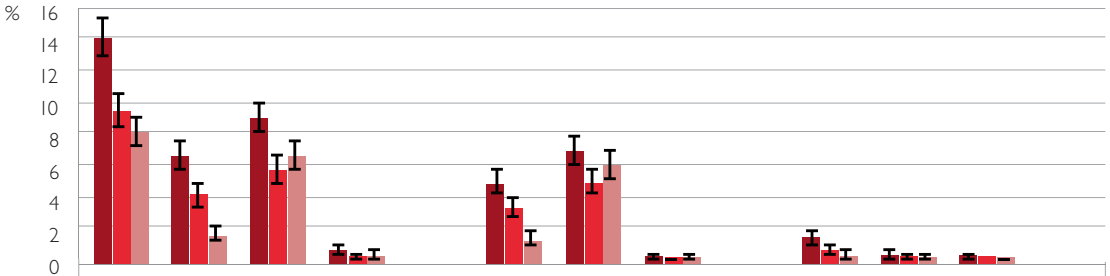
Alcohol and drugs

Prevalence of psychoactive substances consumption in drivers

Since 2008, prevalence studies have been carried out on a regular basis to determine the consumption of psychoactive substances by drivers travelling on public roads. To date, three editions of the study have been completed: DRUID project (2008-2009), Study on the EDAP prevalence for 2013 and 2015.

The evolution of alcohol consumption is gradual in the three editions of the study: in 2008, 6.6% of the drivers showed recent alcohol consumption above 0.05 mg/l in exhaled air, in 2013 the percentage was 4.2% and in 2015 was 1.7%. For the remaining substances, there was a decrease in 2013 as against 2008, interrupted in the 2015 edition by an upward trend in drugs consumption, without reaching the levels recorded in 2008.

Figure 16. Evolution of the consumption of alcohol, drugs and medicines when driving (years 2008, 2013 and 2015)



	Some substance	Alcohol	Drugs	Medicines	Alcohol only	Drugs only	Medicines only	A+D	F+D	A+D+F	A+F
DRUID-2008	14.05	6.61	9.01	0.73	4.92	6.93	0.17	1.51	0.39	0.18	0
DRUID-2013	9.34	4.16	5.79	0.29	3.41	4.87	0.09	0.72	0.18	0.01	0
EDAP-2015	8.09	1.68	6.63	0.40	1.31	6.05	0.15	0.33	0.22	0.04	0

A=Alcohol >0.05 mg/l exhaled air; D=Drugs; F=Medicines

Presence of psychoactive substances in drivers involved in a road traffic accident[4]

Over the past two years DGT has established a collaboration with the Spanish National Toxicology and Forensic Science Institute (INTCF) and the Institutes of Forensic Medicine and Science (IML) in Murcia and Galicia, with a two-fold objective: on the one hand, to standardise the definitions of road traffic fatality, as well as the exclusion criteria (suicide, illness, homicide); on the other hand, to connect the National Register for Road Traffic Accident Victims (RNVAT) database, which contains

[4] *The information from Catalonia and Basque Country is not included.*

detailed information on individuals, vehicles, infrastructures and environments, with the INTCF and the IML databases, which contain the results of the alcohol and drug tests conducted on the samples taken from fatally injured drivers. This collaboration has enabled us to significantly enrich the quantity and quality of the available information on the role that alcohol and drugs play on road traffic accidents.

As a summary of the cases reported by the various sources, the following data (excluding Catalonia and Basque Country) can be mentioned:

In 2017, there were 120,233 drivers involved in casualty accidents, of whom 955 were killed.

The Spanish National Toxicology Institute performed the analysis of samples corresponding to 651 drivers[5], of which 606 cases could be identified in the National Register for Road Traffic Accident Victims (RNVAT).

The Institute of Forensic Medicine and Science in Murcia performed analysis on samples from 44 drivers identified in the RNVAT.

The Institute of Forensic Medicine and Science in Galicia performed analysis on samples from 33 drivers identified in the RNVAT.

At present, collaboration mechanisms with new Institutes of Forensic Medicine and Science are being developed so that experts can have access to an enhanced percentage of killed drivers for whom there is a blood test available. It should be recalled that in case of death it is compulsory to perform a blood test.

Besides, it should be taken into account that the Traffic Division of the Guardia Civil, the Chartered Police of Navarre and the various local police forces have performed, and recorded on RNVAT, alcohol tests to 41,169 surviving drivers and drugs tests to 4,624 surviving drivers.

In the analysis below a positive alcohol test means those results exceeding the legal limit established in Article 20 of the General Regulations on Road Traffic[6]: on a general basis, a blood alcohol content higher than 0.5 grams per litre or a breath alcohol content higher than 0.25 milligrams per litre; in the case of novice or professional drivers, a blood alcohol content higher than 0.3 grams per litre, or a breath alcohol content higher than 0.15 milligrams per litre[7].

In 2017, 120,233 drivers were involved in casualty accidents on interurban and urban roads; of them, 36% were tested for alcohol. In the case of drivers killed, the percentage of tested drivers was 72%, of hospitalised injured drivers was 21%, of non-hospitalised injured drivers was 33% and of non-injured drivers was 17%.

As regards the tests for alcohol with a positive result: 26% of killed drivers tested positive, 15% of the hospitalised injured drivers, 8% of the non-hospitalised injured drivers and 7% of the non-injured drivers.

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5 *Spanish National Toxicology and Forensic Science Institute (2018) Road traffic fatalities. Records 2017.*

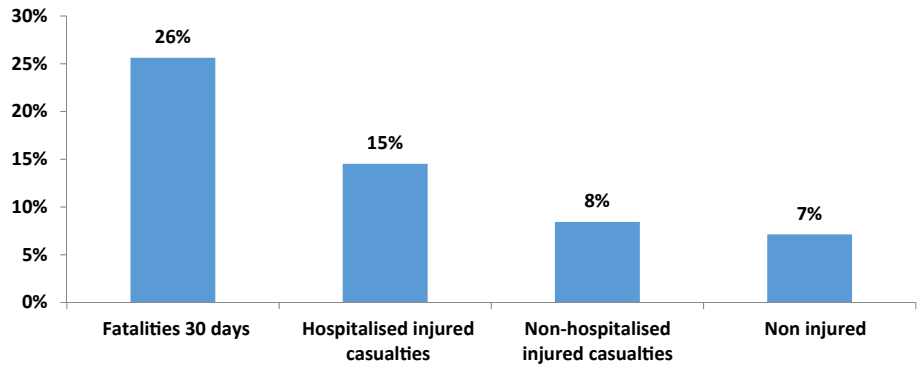
6 *Royal Decree 1428/2003 of 21 November approving the General Regulations on Road Traffic for applying and implementing the articled text on the Law on Road Traffic, Motor Vehicles and Road Safety, approved by Royal Legislative Decree 339/1990 of 2 March 1990.*

7 *The Spanish National Toxicology and Forensic Science Institute, in its road traffic fatality records, identifies as positive those cases with blood alcohol content higher than 0.3g/l.*

Table 89. Results of alcohol testing in drivers involved in casualty accidents. Interurban and urban roads. Year 2017, 2016 values in red and in brackets. (Catalonia and Basque Country excluded)

Severity of casualty	Total drivers	Tested drivers	% of tested drivers	Drivers testing positive	Alcohol positive percentage
Fatalities	955	683	72% (70%)	175	26% (27%)
Hospitalised injured casualties	4,599	985	21% (18%)	143	15% (15%)
Non-hospitalised injured casualties	56,140	18,409	33% (31%)	1,552	8% (9%)
No healthcare required	56,675	23,056	41% (39%)	1,643	7% (7%)
Not classified	1,864	315	17% (15%)	22	7% (10%)
Total	**120,233**	**43,448**	**36% (34%)**	**3,535**	**8% (9%)**

Figure 17. Percentage of alcohol tests with a positive result, by severity degree. Drivers involved in casualty accidents. Interurban and urban roads. Year 2017. (Catalonia and Basque Country excluded)



On interurban roads, 46,147 drivers were involved in casualty accidents, 71% of which were tested for alcohol. The percentage of tests performed in the case of fatally injured drivers is 73%. As for surviving drivers, tests were performed to 32% of hospitalised injured casualties, to 65% of non-hospitalised injured casualties and 86% of uninjured drivers. These variations are related to the difficulties in performing tests to determine alcohol content in exhaled air in those cases of greater severity.

The percentage of positive alcohol tests on interurban roads increases with the severity of the driver, from 4% in uninjured drivers to 24% in fatally injured drivers. With regard to the evolution of the percentage of positive tests as compared to the previous year, no significant variation is observed.

Table 90. Results of alcohol testing in drivers involved in casualty accidents. Interurban roads. Year 2017, 2016 values in red and in brackets. (Catalonia and Basque Country excluded)

Severity of casualty	Total drivers	Tested drivers	% of tested drivers	Drivers testing positive	Alcohol positive percentage
Fatalities	781	571	73% (73%)	139	24% (25%)
Hospitalised injured casualties	2,589	840	32% (26%)	91	11% (12%)
Non-hospitalised injured casualties	23,788	15,394	65% (62%)	999	6% (7%)
No healthcare required	18,468	15,808	86% (85%)	637	4% (5%)
Not classified	521	213	41% (37%)	2	1% (3%)
Total	**46,147**	**32,826**	**71% (68%)**	**1,868**	**6% (6%)**

On urban roads, 74,086 drivers were involved in casualty accidents, 14% of whom were tested for alcohol. The percentage of tests performed in the case of fatally injured drivers is 64%. As for surviving drivers, tests were performed to 7% of hospitalised injured casualties, to 9% of non-hospitalised injured casualties and 19% of uninjured drivers.

As with interurban roads, the percentage of positive alcohol tests on urban roads increases with the severity of the driver, from 14% in uninjured drivers to 32% in fatally injured drivers. We can observe that, for all severity degrees, the percentages of positive alcohol tests are higher than those for interurban roads.

Table 91. Results of alcohol testing in drivers involved in casualty accidents. Urban roads. Year 2017, 2016 values in red and in brackets. (Catalonia and Basque Country excluded)

Severity of casualty	Total drivers	Tested drivers	% of tested drivers	Drivers testing positive	Alcohol positive percentage
Fatalities	174	112	64% (60%)	36	32% (37%)
Hospitalised injured casualties	2,010	145	7% (6%)	52	36% (37%)
Non-hospitalised injured casualties	32,352	3,015	9% (10%)	553	18% (18%)
No healthcare required	38,207	7,248	19% (19%)	1,006	14% (13%)
Not classified	1,343	102	13% (7%)	20	20% (24%)
Total	**74,086**	**10,622**	**14% (14%)**	**1,667**	**16% (15%)**

In addition to the result of the test (positive/negative), the specific value of the blood or breath alcohol concentration is given. The results observed for the various severity degrees in drivers are presented below.

As regards driver fatalities, the most remarkable fact is that 74% of the positive cases show a concentration three times higher than the legal limit established in the General Regulations on Road Traffic. This percentage is 74% for interurban roads and 75% for urban roads. Besides, the percent-

age of cases exceeding the legal limit established in Article 379 of the Spanish Criminal Code (a breath alcohol concentration above 0.60 milligrams per litre or a blood alcohol concentration above 1.2 grams per litre, any levels higher than these are considered a crime against road safety) is 81% for interurban roads and 83% for urban roads.

Figure 18. Blood alcohol concentration in drivers killed in traffic accidents who tested positive. Interurban roads. Year 2017. (Catalonia and Basque Country excluded)

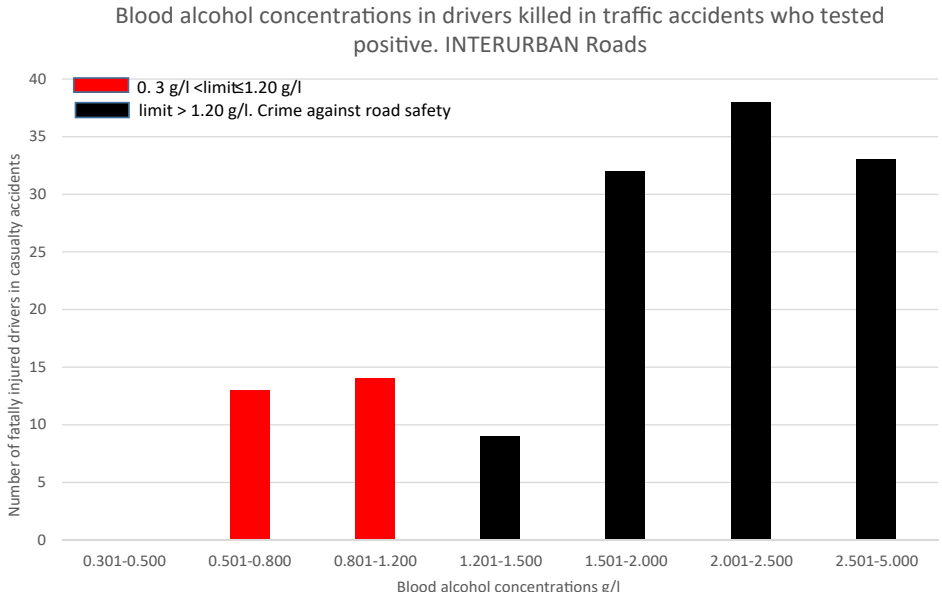
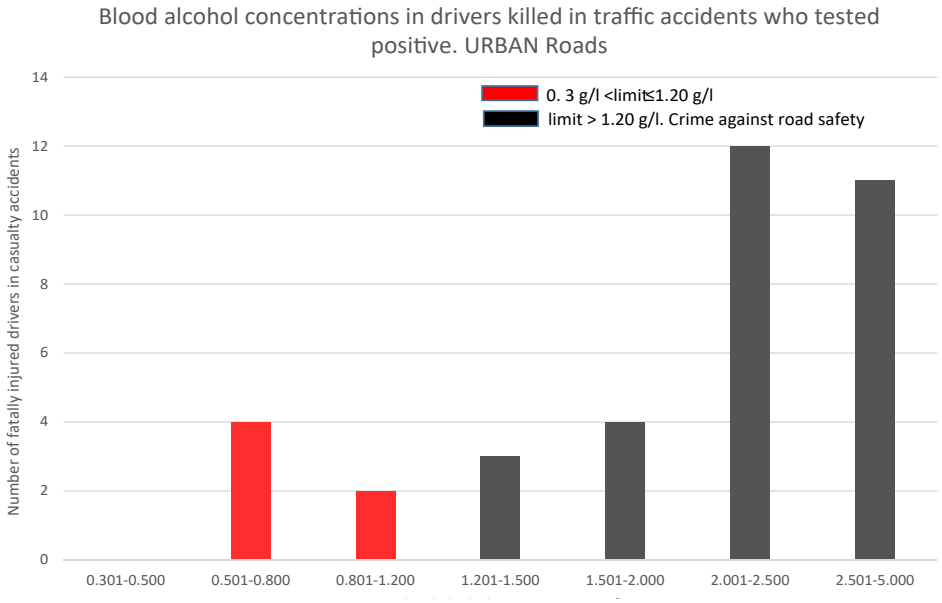


Figure 19. Blood alcohol concentration in drivers killed in traffic accidents who tested positive. Urban roads. Year 2017. (Catalonia and Basque Country excluded)



As regards the consumption of illegal drugs[8] there is evidence on 72% of fatally injured drivers, of whom 15% tested positive.

The percentage of fatally injured drivers submitted to test was 73% on interurban roads and 66% on urban roads, of whom 15% tested positive on interurban roads and 16% on urban roads.

Table 92. Results of drug testing in drivers involved in casualty accidents. Interurban and urban roads. Year 2017. (Catalonia and Basque Country excluded)

Severity of casualty	Total driver fatalities	Fatally injured drivers tested	% of fatally injured drivers tested	Fatally injured drivers testing positive	Drug positive percentage
Interurban roads	781	569	73%	84	15%
Urban roads	174	114	66%	18	16%
Total	**955**	**683**	**72%**	**102**	**15%**

The most common substances on fatally injured drivers testing positive for drugs are cocaine (47%) and cannabis (61%). Opioids and amphetamines are less common (4%).

Table 93. Substances tested for in tests conducted on drivers with a positive result. Interurban and urban roads. Year 2017, 2016 values in red and in brackets. (Catalonia, Basque Country excluded)

SUBSTANCE	Fatally injured drivers[1]	Percentage
Cocaine	48	47% (52%)
Opioids	4	4% (6%)
Amphetamines	4	4% (7%)
Cannabis	62	61% (52%)
Ketamine	1	1% (1%)
Drivers testing positive for drugs	**102**	**100% (100%)**

The percentage of fatally injured drivers testing positive for alcohol and/or drugs was 33% in 2017.

Table 94. Fatally injured drivers submitted to alcohol and/or drug testing and results. Interurban and urban roads. Year 2017, 2016 values in red and in brackets. (Catalonia and Basque Country excluded)

	Tested for alcohol and/or drugs	Positive in alcohol and/or drug testing	Percentage of positive in alcohol and/or drug testing
Fatally injured drivers	686	226	33% (34%)

[8] *The following substances have been considered: amphetamines, cocaine, cannabis, opioids and ketamine. The annual reports of the Spanish National Toxicology and Forensic Science Institute include an analysis of the presence of psychotropic drugs in fatally injured drivers.*

Controls performed by the Traffic Division of the Guardia Civil (ATGC)[9]:

Alcohol

In 2017 the Traffic Division of the Guardia Civil performed 5,185,517 breath alcohol tests within the framework of their competences, which means 2% more as compared to the tests conducted 2016. Of the 4,485,385 preventive control tests performed, 1.4% were positive for alcohol (above the legal limits).

Drugs

In the context of the duties performed by the Traffic Division of the Guardia Civil, they carried out 89,812 drug tests in 2017, as against the 65,169 tests carried out in 2016, which means an increase by 38%. Of the 78,585 preventive control tests performed, 35% were positive.

Seat belt and helmet

Motorcycles

1% of fatally injured and 2% of hospitalised injured motorcycle users did not wear the safety helmet on interurban roads. On urban roads, 8% of fatally injured and 3% of hospitalised injured motorcyclists did not wear the safety helmet in 2017. The number of unhelmeted motorcyclists being killed on interurban roads has declined, compared with 2016, whereas the figures for unhelmeted hospitalised injured motorcyclists increased on this type of road. On urban roads, both trends are also observed.

Table 95. Fatally and hospitalised injured motorcyclists by helmet use. Spain, 2012-2017

Motorcycles. Interurban roads	2012	2013	2014	2015	2016	2017
Unhelmeted fatalities	11	8	5	12	5	2
Total motorcycle fatalities	208	203	188	247	234	251
% non-use of helmet	5%	4%	3%	5%	2%	1%
Unhelmeted hospitalised injured motorcyclists	18	16	11	10	12	19
Total hospitalised injured motorcyclists	1,251	1,152	1,125	1,180	1,214	1,250
% non-use of helmet	1%	1%	1%	1%	1%	2%
Motorcycles. Urban roads	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Unhelmeted fatalities	14	14	10	8	10	9
Total motorcycle fatalities	94	98	99	82	109	108
% non-use of helmet	*				9%	8%
Unhelmeted hospitalised injured motorcyclists	157	120	44	39	41	51
Total hospitalised injured motorcyclists	1,204	1,358	1,458	1,419	1,467	1,534
% non-use of helmet	13%	9%	3%	3%	3%	3%

** The percentage distribution is not shown, as the total number is below 100.*

[9] *Their activity excludes public roads on the Basque Country and Catalonia as well as Municipalities with their own local police forces.*

Mopeds

As regards moped fatalities in 2017, 1 out of 26 did not wear a helmet on interurban roads as nor did 1 out 23 on urban roads. Comparing 2017 with the previous year, on interurban roads, there has been a decrease in unhelmeted moped fatalities and an increase in unhelmeted hospitalised injured moped users. On urban roads the number of unhelmeted fatally and hospitalised injured moped users has decreased.

Table 96. Fatally and hospitalised injured moped users by helmet use. Spain, 2012-2017

Mopeds. Interurban roads	2012	2013	2014	2015	2016	2017
Unhelmeted fatalities	13	8	0	4	4	1
Total moped fatalities	42	34	21	28	26	26
% non-use of helmet	*	*	*	*	*	*
Unhelmeted hospitalised injured moped users	32	20	8	18	9	14
Total hospitalised injured moped users	279	267	156	198	167	166
% non-use of helmet	11%	7%	5%	9%	5%	8%
Mopeds. Urban roads	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Unhelmeted fatalities	3	0	1	3	2	1
Total moped fatalities	24	20	32	28	28	23
% non-use of helmet	*	*	*	*	*	*
Unhelmeted hospitalised injured moped users	51	34	28	28	27	17
Total hospitalised injured moped users	492	551	482	471	458	452
% non-use of helmet	10%	6%	6%	6%	6%	4%

** The percentage distribution is not shown, as the total number is below 100.*

Cars and vans

On interurban roads, in 2017, 24% of car and van fatalities aged 12 and over did not wear the seat belt and neither did 35 out of the 87 fatalities on urban roads. As for hospitalised injured casualties, 9% of them did not wear the seat belt on interurban roads and neither did 18% on urban roads.

Table 97. Fatally and hospitalised injured car and van occupants aged 12 and over by seat belt use. Spain, 2012-2017

Cars and vans. Occupants aged 12+ Interurban roads	2012	2013	2014	2015	2016	2017
Fatalities not wearing a seat belt	207	146	169	155	154	189
Total car and van fatalities	852	672	733	695	722	784
% non-use of seat belt	24%	22%	23%	22%	21%	24%
Hospitalised injured occupants not wearing a seat belt	386	259	230	242	267	230
Total hospitalised injured car and van occupants	3,440	2,766	2,533	2,450	2,626	2,457
% non-use of seat belt	11%	9%	9%	10%	10%	9%
Cars and vans. Occupants aged 12+ Urban roads	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Fatalities not wearing a seat belt	23	21	23	19	33	35
Total car and van fatalities	71	75	75	70	83	87
% non-use of seat belt	*	*	*	*	*	*
Hospitalised injured occupants not wearing a seat belt	190	151	120	87	102	109
Total hospitalised injured car and van occupants	707	754	680	637	555	608
% non-use of seat belt	27%	20%	18%	14%	18%	18%

* *The percentage distribution is not shown, as the total number is below 100.*

On interurban roads, in 2017, 5 out of the 17 child fatalities under 12 years of age did not use a safety system, neither CRS nor a seat belt. As for hospitalised injured casualties on interurban roads, 4 out of the 76 hospitalised injured children under 12 years of age did not use any safety system. On urban roads, no child fatalities under 12 years of age were reported and only 1 out of the 11 hospitalised injured children under 12 years of age did not use either CRS or a seat belt.

Table 98. Fatally and hospitalised injured car and van occupants aged up to 12 years by child restraint system and seat belt use. Spain, 2012-2017

Cars and vans. Occupants aged up to 12 years. Interurban roads	2012	2013	2014	2015	2016	2017
Fatalities not wearing CRS or seat belt	8	4	2	4	3	5
Total car and van fatalities	30	20	13	13	18	17
% non-use of seat belt or CRS						
Hospitalised injured occupants not wearing a seat belt or CRS	7	11	9	7	6	4
Total hospitalised injured car and van occupants	88	76	71	66	72	76
% non-use of seat belt or CRS	*	*	*	*	*	*
Cars and vans. Occupants aged up to 12 years. Urban roads	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Fatalities not wearing CRS or seat belt	1	0	0	0	0	0
Total car and van fatalities	2	0	1	0	0	0
% non-use of seat belt or CRS	*	*	*	*	*	*
Hospitalised injured occupants not wearing a seat belt or CRS	1	3	0	1	0	1
Total hospitalised injured car and van occupants	10	12	11	8	9	11
% non-use of seat belt or CRS	*	*	*	*	*	*

** The percentage distribution is not shown, as the total number is below 100.*

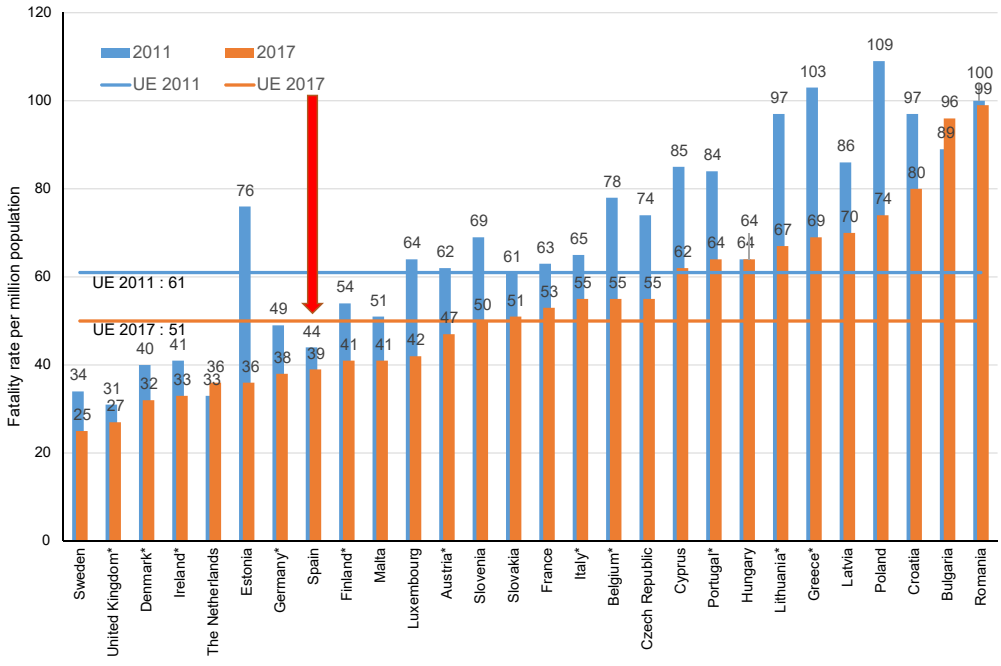
9 The european context

Situation in Spain

In 2017 there were more than 25,200 road traffic fatalities in the 28-European Union, 7% of these fatalities occurred in Spain.That year, the Spanish population represented 9 per cent of the European population. Road accidents in Spain include all traffic accidents occurring on Spanish roads, irrespective of the nationality or the reasons for the stay in our country.

The following graph shows the evolution of fatality rates per million population between 2011 - the year used as reference for halving the number of fatalities as stated in the European Road Safety Strategy - and 2017. In 26 out of the 28 Member States of the EU the rate has decreased compared with 2010 and in 2 Member States this rate increased - the Netherlands (from 33 to 36) and Bulgaria (from 89 to 96). In the case of Spain, the rate was at 44 fatalities per million population (2,478 deaths) in 2011, below the European average rate that was at 61. In 2017 the rate was at 39 fatalities per million population, below the European average rate for that same year (51 deaths per million population). Spain ranks eighth among countries with the lowest figures on accident rate.

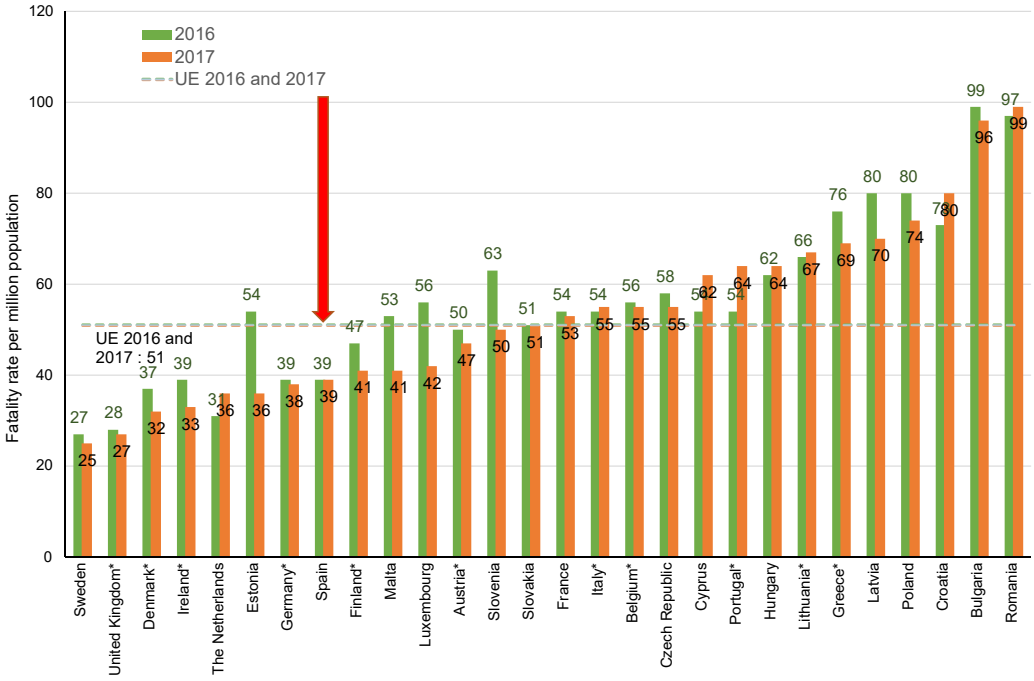
Figure 20. Fatality rate per million population in the European Union. 2011, 2017



* Provisional data
Sources for 2011: European Commission, CARE database and Eurostat. Source 2017: European Transport Safety Council. 12 PIN Report

On the date of issue of this publication, definitive figures on accident rate for the year 2017 have not been published yet by the European Commission, however, provisional data on fatality rates and, therefore, provisional rates per population for that year are known for each Member State.

Figure 21. Fatality rate per million population in the European Union. 2016, 2017



* Provisional data
Sources for 2011: European Commission, CARE database and Eurostat. Source 2017: European Transport Safety Council. 12 PIN Report

The evolution

The evolution of the fatality rate from 2001 to the present shows that the contribution to EU objectives is very different from one country to another.

Table 99. Comparison of fatalities in 2001, 2011, 2016 and 2017 in the European Union Member States

Member State	2001	2011	2016	2017	2017/2001	2017/2011	2017/2016
Germany*	6,977	4,009	3,206	3,177	-54%	-21%	-1%
Austria*	958	523	432	413	-57%	-21%	-4%
Belgium*	1,486	862	637	620	-58%	-28%	-3%
Bulgaria	1,011	658	708	682	-33%	4%	-4%
Czech Republic	1,334	773	611	577	-57%	-25%	-6%
Cyprus	98	71	46	53	-45	-18	7
Croatia	647	418	307	331	-49%	-21%	8%
Denmark*	431	220	211	183	-58%	-17%	-13%
Slovakia	625	328	275	276	-56%	-16%	0%
Slovenia	278	141	130	104	-63%	-26%	-20%
Spain	5,517	2,060	1,810	1,830	-67%	-11%	1%
Estonia	199	101	71	48	-1	-1	-23
Finland*	433	292	250	223	-48%	-24%	-11%
France	8,253	3,963	3,477	3,448	-58%	-13%	-1%
Greece*	1,880	1,141	824	739	-61%	-35%	-10%
Hungary	1,239	638	597	624	-50%	-2%	5%
Ireland*	411	186	186	157	-62%	-16%	-16%
Italy*	7,096	3,860	3,283	3,340	-53%	-13%	2%
Latvia	558	179	158	136	-76%	-24%	-14%
Lithuania*	706	297	192	192	-73%	-35%	0%
Luxembourg	70	33	32	25	-45	-8	-7
Malta	16	17	22	19	3	2	-3
The Netherlands*	1,083	661	629	613	-43%	-7%	-3%
Poland	5,534	4,189	3,026	2,831	-49%	-32%	-6%
Portugal*	1,670	891	563	624	-63%	-30%	11%
United Kingdom	3,598	1,960	1,860	1,783	-50%	-9%	-4%
Romania	2,450	2,018	1,913	1,951	-20%	-3%	2%
Sweden	534	319	270	253	-53%	-21%	-6%
EU-28	**55,092**	**30,808**	**25,726**	**25,252**	**-54%**	**-18%**	**-2%**

Source: European Commission. CARE Database (the European Union's road accidents database) and the European Transport Safety Council. 12th PIN Report.

** Estimated and provisional 2017 data.*

[1] The differences have been estimated as a percentage when the number of cases is higher than 100 and in absolute values when the number is below 100.

ANNEXES

ANNEX I. Methodological notes

Databases used to draft this report

a) National Register for Road Traffic Accident Victims

The National Register for Road Traffic Accident Victims (regulated by Order INT/2223/2014, of 27 October, governing the report of information to the National Register for Road Traffic Accident Victims) contains the data concerning road traffic casualty accidents, defined as those accidents in which at least one of the persons involved was injured. The definitions of the main indicators that must be used are detailed in the abovementioned Order.

The latest available information corresponds to 2016.

The Register database may be requested to the Directorate-General for Traffic via e-mail at the following address: observatorio@dgt.es.

The most significant micro-data and statistical tables may be accessed on the "Portal estadístico" of the Directorate-General for Traffic website www.dgt.es.

b) Deceased records from the Registry Office

On the basis of the Under-Secretary's Resolution of 7 February 2005, publishing that the Secretariat of State for Justice entrusts the management tasks to the National Statistical Institute (INE) as regards the transfer of computerised data on births, marriages and deaths records registered at the Civil Registers, INE facilitates all data corresponding to each and every death recorded at Civil Registers in the whole Spanish territory. These data have been used to merge them with data from road traffic accident registers, according to the methodology explained in this Annex.

c) Death statistics by cause of death

Drawn up by INE, it includes all deaths occurring on the national territory, regardless of the deceased's place of origin. The information must be completed by the physician certifying death, who in addition fills in the statistical death bulletin, stating the immediate cause of death, the pre-existing condition and the underlying cause of death, being the latter the disease or injury that

initiated the chain of pathological events that led directly to death or the circumstances of the accident or violence that produced the fatal injury. Every cause-of-death statement is coded according to the International Classification of Diseases (ICD) established by the World Health Organization (WHO); at present, the ICD-10 classification is being used.

d) European Health Survey in Spain

This survey is part of the proposal from the European Commission to set up a health information system based on surveys. To this end, Member States implemented the European Health Interview Survey (EHIS), coordinated by Eurostat and governed by Regulation (EC) 1338/2008 and by Commission Regulation 141/2013. The European Health Survey in Spain is a section of such survey and is conducted by the National Statistical Institute (INE).

The survey consists of four modules (health status, health determinants, health care use and socio-economic background variables) and provides harmonised information for the different countries. As an indispensable tool, a highly standardised questionnaire was developed so as to allow comparison among countries. In Spain this questionnaire was jointly adapted between INE and the Ministry of Health, Social Services and Equality so that the main indicators in the National Health Survey can be compared, which would allow the sets of the main national indicators to be continued.

In relation to accident rate there were two specific questions:

The first question referred to the type of accident. In this survey road traffic accidents are defined as any accident occurring on a public road, public or private car parks provided that the accident does not happen during working hours in the course of work. Therefore, the estimated number of persons injured as a result of road traffic accidents according to the European Health Survey will be below the real value.

The second question asks about the type of health care assistance received after the road traffic accident.

The latest survey was conducted in 2014 and is available on https://www.mscbs.gob.es/en/estadEstudios/estadisticas/EncuestaEuropea/Enc_Eur_Salud_en_Esp_2014.htm

e) Information on the road network and traffic on the interurban network.

Every year, the Ministry of Development publishes in its Statistical Yearbook (https://www.fomento.es/informacion-para-el-ciudadano/informacion-estadistica/anuario-estadisticas-de-sintesis-y-boletin/anuario-estadistico) the road network, by ownership and road type, as well as the vehicle-kilometres, by road type and province. These indicators are developed from the Ministry's own information —for the State Road Network—, the Autonomous Communities and the Provincial and Island Councils.

Definition of the main indicators

Casualty accidents: those which occur, or are caused, on roads or land which are subject to the legislation on road traffic, motor vehicles and road safety, resulting in one or several people being killed and/or injured and in which at least one vehicle in motion is involved.

Fatal accident: an accident in which at least one person is killed within the first 24 hours of its occurrence.

Casualty: a person killed or injured in a road traffic accident.

Killed / Fatality: a person who, as a result of a road traffic accident, was killed on the spot or sustained injuries which caused death within 30 days after the accident.

Injured casualty: a person who was not killed but sustained one or several serious or slight injuries as a result of a road traffic accident.

Hospitalised injured casualty: a person who was injured in a road traffic accident and who requires hospitalisation for more than 24 hours.

Non-hospitalised injured casualty: a person who was injured in a road traffic accident to whom the definition of seriously injured casualty cannot be applied.

Methodology used to estimate fatalities within 30 days

In the field of transport statistics, it is understood that the fatality figures due to a road traffic accidents must be counted within the threshold of 30 days, as stated in the Glossary for Transport Statistics by UNECE-Eurostat-ITF.

In the case of Spain, the number of fatalities occurring within the first 24 hours is determined through the monitoring of all cases by law enforcement officers. The number of fatalities occurring within 30 days of the accident has been determined using correction factors deducted from the effective monitoring of a representative sample of hospitalised injured casualties. These correction factors were first applied in 1993 and reviewed on two occasions, in 1996 and in 2000; they were used until 2010.

Since 2011 the method of calculation is a two-phased process:

During the first phase, the DGT's road traffic accident register is linked with the INE's death records, so the hospitalised injured casualties recorded in the road traffic accident registers can be searched, provided that the entries contain identifying information that allows such search. Those hospitalised injured casualties recorded as deceased in the INE's death records are considered road traffic fatalities as long as the date of death is within the 30 day period following the accident.

During the second phase, the correction factor is calculated. This factor will be applied to those hospitalised injured casualties lacking enough identifying information to make the search in the INE's death records. The calculation of the factor is based on the data obtained in the preceding phase and is as follows:

$$Correction\_factor = x = \frac{nr\_of\_linked\_records(only\_seriously\_injured)}{nr\_of\_records\_of\_the\_first\_stratum(only\_seriously\_injured)}$$

As regards the identifying information concerning hospitalised injured casualties recorded in the road traffic accident register, in 2011 there was enough information for 65% of the hospitalised injured casualties; this percentage rose to 80% in 2012, dropped to 76% in 2013 and rose again to

96% in 2014. In 2014 the correction factors were applied to the 438 hospitalised injured casualties lacking identifying information corresponding to the autonomous community of the Basque Country and to the City Council of San Cristóbal de La Laguna.

No correction factor has been applied since 2015 because the provision of identifying information concerning hospitalised injured casualties has significantly improved, which is added to the reporting of fatalities within 30 days following the accident by the autonomous regions with powers in traffic issues.

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