Main figures on
Road Traffic Accidents
Spain 2018

MINISTERIO DEL INTERIOR

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Dirección General de Tráfico

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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 16th issue means that the objective has been reached, at least partially.

The figure for road fatalities in 2018 - 1,806 deaths - means a decrease by 1.3 % as compared with 2017 and breaks the trend line for increase in the number of road deaths experienced in the previous four years. This figure places us with a mortality rate of 39 deaths per million population in 2018, the seventh lowest rate in the European Union. However, this rate is still above 37 deaths per million population, the strategic objective set for 2020 in the Strategy on Road Safety 2011-2020.

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

– Conventional roads: 994 fatalities account for 55% of all fatalities reported in road traffic accidents; 75% if we restrict to interurban roads. In 2018, fatality figure on interurban roads decreased by 2% compared with the previous year; this contrasts with the 8% increase recorded on dual carriageways.

– Vulnerable users: they represent 48% of the total road traffic fatalities (pedestrians: 386 fatalities; pedal cycles: 58 fatalities; mopeds: 62 fatalities; motorcycles: 359 fatalities), 2% more than in 2017. In the case of pedestrian fatalities, the figure has increased by 45% on interurban roads (from 103 in 2017 to 149 in 2018).

– There were 489 fatalities on urban roads in 2018 (27% of the fatalities) of which 81% were vulnerable users. In particular, there were 237 pedestrian fatalities, of which 66% were 65 years of age or over.

– Those 65 and older, who are 19% of the population, represent 27% of the fatalities (496) and are above the total of road traffic fatalities on built-up area (489).

– Vans: The percentage of accidents involving at least one van increased from 8.6% in 2013 to 10.6% in 2018.

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 in Spain:

– Distraction: it is a contributory factor in 32% of fatal accidents.

– Excessive and inappropriate speed: it is a contributory factor in 22% of fatal accidents.

– Alcohol and drugs consumption: alcohol is a contributory factor in 21% 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.

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. 2018 FIGURES

1 Casualty accidents in 2018

In 2018 the various police forces reported 102,299 casualty accidents. A total of 1,806 people were killed at the time of the accident or within 30 days after its occurrence; besides, 8,935 people were admitted to hospital and 129,674 people were injured but did not require hospitalization, according to police sources. The number of casualty accidents increased by 66, compared with the previous year. With regard to casualties, there were 24 fewer deaths than in 2017 and this represents a decrease by 1%; 611 fewer hospitalised injured casualties, i.e. a decrease by 6%; and 58 more non-hospitalised injured casualties.

On interurban roads there were 1% more road traffic accidents, 4 fewer fatalities, 7% fewer hospitalised injured casualties and 1% more non-hospitalised injured casualties. As for urban roads, the number of road traffic accidents decreased by 1%, fatalities by 4% and hospitalised injured casualties by 6%, whereas the number of non-hospitalised injured casualties decreased by 1%.

Analysing in greater detail the distribution of the number of fatalities, certain aspects can be highlighted. First of all, a different evolution in dual carriageways —an increase by 8%— and on conventional roads —decrease by 2%—.

As regards the type of accident, a significant reduction can be seen in head-on collisions —11% fewer fatalities— and an increase in pedestrian collisions —12% more—. As regards the increase in the number of collisions involving pedestrians and to put the figure into context, in 2017 there was a considerable drop in the number of pedestrians killed compared to previous years.

The number of road traffic fatalities has evolved differently by mode of travel. In particular, there is a reduction in the number of cyclists: 20 fewer fatalities (from 78 to 58); in car occupants: 9% less; and in goods vehicle occupants: 3% less. On the contrary, there has been an increase in the number of bus or coach fatalities, 9 more (from 3 to 12 occupants), and in moped users, 13 more fatalities (from 49 to 62). Meanwhile, the number of fatalities for motorcycle fatalities recorded was the same as in 2017.

As regards the age of the fatalities, a significant increase in the 65-74 age group is observed which means an increase by 14%. The 25-34 and 55-64 age groups experienced reductions by 11%.

Most casualty accidents occur on urban roads which represent 63% of the total. The greatest number of fatalities occurs on conventional roads (55% of the total, 75% if the analysis is restricted to interurban roads). 68% of the accidents occur on working days, which account for 59% of the

fatalities. As for the type of accident, although side, rear and multiple collisions represent more than half of the accidents, run-off-road collisions register the greatest fatality rate.

Despite the fact that a car is involved in 77% of casualty accidents, the fatalities in this type of vehicle account for 41% of the total. Pedestrians are the most vulnerable road users, as is proved by the fact that they are involved in 13% of casualty accidents but they represent 21% of the total fatalities. In terms of severity degree, pedestrians are followed by motorcyclists who are involved in 27% of accidents with 20% of fatalities. As regards the age, 45% of fatalities were between 35 and 64 years of age. In 69% of casualty accidents there was, at least, a male involved.

Table 1. Number of casualty accidents, fatalities, hospitalised and non-hospitalised injured casualties. Percentage difference compared with the previous year. Spain, 2018

	2018				Variation 2018/2017			
	Casualty accidents	Fatalities	Hospitalised injured casualties	Non-hospitalised injured casualties	Casualty accidents	Fatalities	Hospitalised injured casualties	Non-hospitalised injured casualties
Total	**102,299**	**1,806**	**8,935**	**129,674**	**0%**	**-1%**	**-6%**	**0%**
Location								
Interurban road	37,892	1,317	4,451	53,124	1%	0%	-7%	1%
Motorway	3,722	82	271	5,708	-5%	-3	-5%	-5%
Dual carriageway	9,388	241	741	14,548	9%	8%	2%	10%
Conventional road	24,782	994	3,439	32,868	-1%	-2%	-8%	-1%
Urban road	64,407	489	4,484	76,550	-1%	-4%	-6%	-1%
Road running through town	1,595	43	168	1,882	-4%	-5	4%	-9%
Streets	62,169	443	4,281	73,780	0%	-3%	-7%	-1%
Motorway/Urban dual c'way	643	3	35	888	0%	-1	9	0%
Days of week								
Working days	69,759	1,068	5,512	86,658	0%	-5%	-5%	0%
Weekend day	32,540	738	3,423	43,016	0%	4%	-9%	0%
Type of accident								
Head-on collision	3,101	290	913	4,749	1%	-11%	0%	3%
Side and T-bone collision	29,845	243	2,023	38,115	0%	-6%	-11%	-1%
Rear and multiple collision	22,483	140	966	35,231	-4%	-3%	-6%	-4%
Run-off-road collision	14,763	582	1,892	17,595	0%	-3%	-6%	3%
Overturning	3,627	26	207	3,872	0%	6	-18%	1%
Pedestrian impact [3]	13,168	378	1,797	12,649	-2%	12%	-6%	-2%
Other type	15,312	147	1,137	17,463	8%	4%	-1%	9%
Mode of travel [4]								
Bicycle	7,598	58	620	6,633	-6%	-20	-11%	-6%
Moped	7,087	62	528	6,836	-6%	13	-15%	-7%
Motorcycle	27,967	359	2,682	26,520	3%	0%	-4%	4%
Car	78,314	732	2,662	67,153	0%	-8%	-7%	0%
Goods vehicle	16,121	151	396	7,010	-1%	-3%	-14%	-2%
Bus or coach	2,269	12	76	2,227	3%	9	29	13%
User [4,5]								
Driver	81,229	1,153	5,663	83,928	0%	-2%	-5%	1%
Passenger	24,332	267	1,439	33,531	-3%	-13%	-11%	-2%
Pedestrian [3]	13,475	386	1,833	12,215	-2%	10%	-6%	-1%
Age [4,5]								
0-14 years	5,565	25	331	6,350	-5%	-10	-4%	-4%
15-24 years	19,026	207	1,169	21,669	-2%	4%	-16%	-2%

	2018				Variation[1] 2018/2017			
	Casualty accidents	Fatalities	Hospitalised injured casualties	Non-hospitalised injured casualties	Casualty accidents	Fatalities	Hospitalised injured casualties	Non-hospitalised injured casualties
25-34 years	26,154	261	1,467	27,630	0%	-11%	-11%	1%
35-44 years	25,985	301	1,634	26,769	1%	4%	-4%	2%
45-54 years	20,680	288	1,585	20,571	2%	-1%	-7%	2%
55-64 years	12,910	220	1,130	12,565	4%	-11%	-1%	4%
65-74 years	6,941	217	814	6,580	1%	14%	6%	0%
75-84 years	3,967	189	554	3,561	-1%	2%	7%	-3%
85 and over	1,236	90	162	1,031	-1%	1	-10%	1%
Gender[4,5]								
Male	70,441	1,399	6,257	75,778	0%	0%	-7%	0%
Female	45,643	407	2,653	53,424	1%	-4%	-5%	1%

[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 working day includes from 0:00 hours on Monday to 14:59 hours on Friday; weekend days start at 15:00 on Friday and end at 23:59 on Sunday.

[3] 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.

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

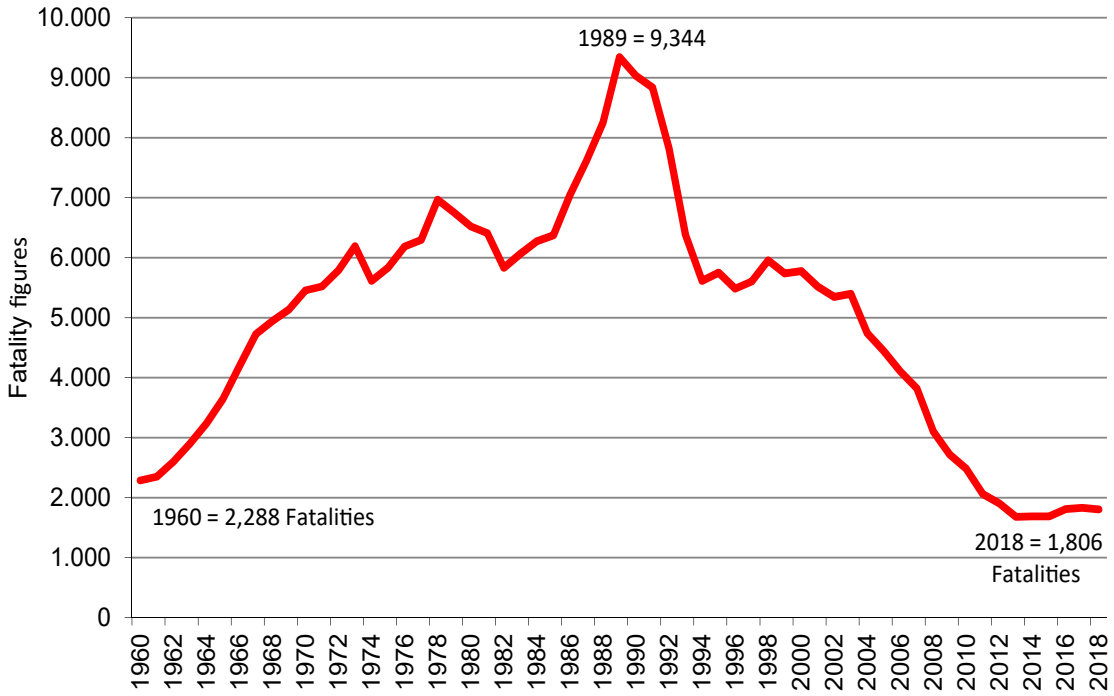
[5] Accidents involving at least 1 casualty are recorded on the reference group.

2 The evolution

Evolution from 1960 to 2018

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 deaths has steadily decreased, more or less markedly, until reaching the lowest annual total on record in 2013 with 1680 people being killed. After four consecutive years of increase in the number of fatalities, in 2018, with 1,806 deaths, there has been a decrease by 1.3% compared to 2017.

Figure 1. Evolution of fatalities in traffic casualty accidents. Spain, 1960-2018



Evolution of the main indicators 2009-2018

General data

In the comparison of 2017 and 2018, we can observe that the fatality figure has decreased by 1% and the hospitalised injured casualties by 6%; the figure for non-hospitalised injured casualties has remained the same. If the evolution is analysed, we can observe a general pattern of decrease in the number of fatalities and hospitalised injured casualties until 2013, in the case of fatalities it was interrupted from 2014 to 2017. Besides, the total number of casualty accidents has shown decreases and increases, with no clear trends, and this can be related to changes in reporting levels or, in other words, in the information system coverage.

Fatality rate and hospitalised injured casualty rate per inhabitant and vehicle fleet show a trend similar to that of the absolute numbers, this is a pattern of decrease until 2014, followed by a period of stagnation in the case of injured casualties, and of increase in the case of fatalities. In 2018, fatality rate per million population has remained constant and hospitalised injured casualty rate has decreased by 7% as compared with 2017.

Table 2. Main indicators of accident rate and exposure to risk. Spain, 2009-2018

Indicator	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Difference[1] 2018/2017	Year-on-year variation 2009-2018
Casualty accidents	88,251	85,503	83,027	83,115	89,519	91,570	97,756	102,362	102,233	102,299	0%	2%
Fatalities	2,714	2,478	2,060	1,903	1,680	1,688	1,689	1,810	1,830	1,806	-1%	-4%
Hospitalised casualties	13,923	11,995	11,347	10,444	10,086	9,574	9,495	9,755	9,546	8,935	-6%	-5%
Non-hospitalised injured casualties	111,043	108,350	104,280	105,446	114,634	117,058	124,960	130,635	129,616	129,674	0%	2%
Fatalities per million population	59	53	44	41	36	36	36	39	39	39	-1	-19
Daily average number of fatalities	7	7	6	5	5	5	5	5	5	5	0	-2
Vehicle fleet	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	35,188,690	2%	1%
Fatalities per million vehicles of the vehicle fleet	83	75	62	58	52	52	51	54	53	51	-2	-30
Case fatality rate[2]	2.1	2	1.8	1.6	1.3	1.3	1.2	1.3	1.3	1.3	0	-0.8
Hospitalised injured casualties per M p.tion	301	258	243	223	216	206	204	210	205	191	-7%	-5%
Traffic vehicle-km 10[6]*	249,371	241,131	234,678	224,285	221,610	222,689	230,840	239,353	244,661	250,192	2%	0%

[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 two million vehicles in the last decade, considering all categories of vehicles. In 2018 an increase by 757,875 units has been registered in the total vehicle fleet as compared with the previous year. The greatest increase in absolute figures is for cars, with 573,750 more vehicles, which represents an increase by 2% in percentage terms. In absolute terms, they are followed by motorcycles with 132,674 more units, which mean 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 24 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 ten years Spain, 2009-2018

Vehicle Fleet	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Diff. % 2018/2017	Year-on-year variation 2009-2018
Trucks and vans	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	4,980,911	1%	0%
Buses or coaches	62,663	62,445	62,358	61,127	59,892	59,799	60,252	61,838	63,589	64,905	2%	0%
Cars	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	24,074,151	2%	1%
Motorcycles	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	3,459,722	4%	3%
Mopeds	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	1,933,445	-1%	-2%
Industrial Tractors	206,730	199,486	195,960	186,964	182,822	186,060	195,657	207,889	218,154	225,942	4%	1%
Other vehicles[1]	447,363	450,514	459,117	460,196	463,181	475,872	420,734	425,411	435,624	449,614	3%	0%
Total	**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**	**35,188,690**	**2%**	**1%**

[1] The other vehicles category includes special vehicles such as sweepers, snowploughs, cranes, work-site machines, etc. Trailers and semi-trailers have been excluded.

The average age of the vehicle fleet under 25 years ranges from 8.6 years for industrial tractors to 13.2 years for trucks with a MAM exceeding 3500 kg. The average age of buses or coaches is 9.7 years. The average age of cars is 10.9 years, over the average age of 9.7 years for motorcycles.

Table 4. Age of vehicle fleet*. Spain, 2011-2018.

Age of the 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
2018	12.9	13.2	8.6	11.6	9.7	10.9	9.7

** Only vehicles under 25 years of age are considered.*

Registered drivers

In 2018 there were 26,853,754 registered drivers, a figure which means a percentage increase by 1% compared with 2017.The registered driver rate was at 677 per thousand driving age population. Between the age of 40 and 59, the rate exceeds 800 drivers per thousand population; for the age groups 25-39 and 60-64 the rate exceeds 700 drivers per thousand population; and for the age group 65-69 the rate exceeds the value 600.

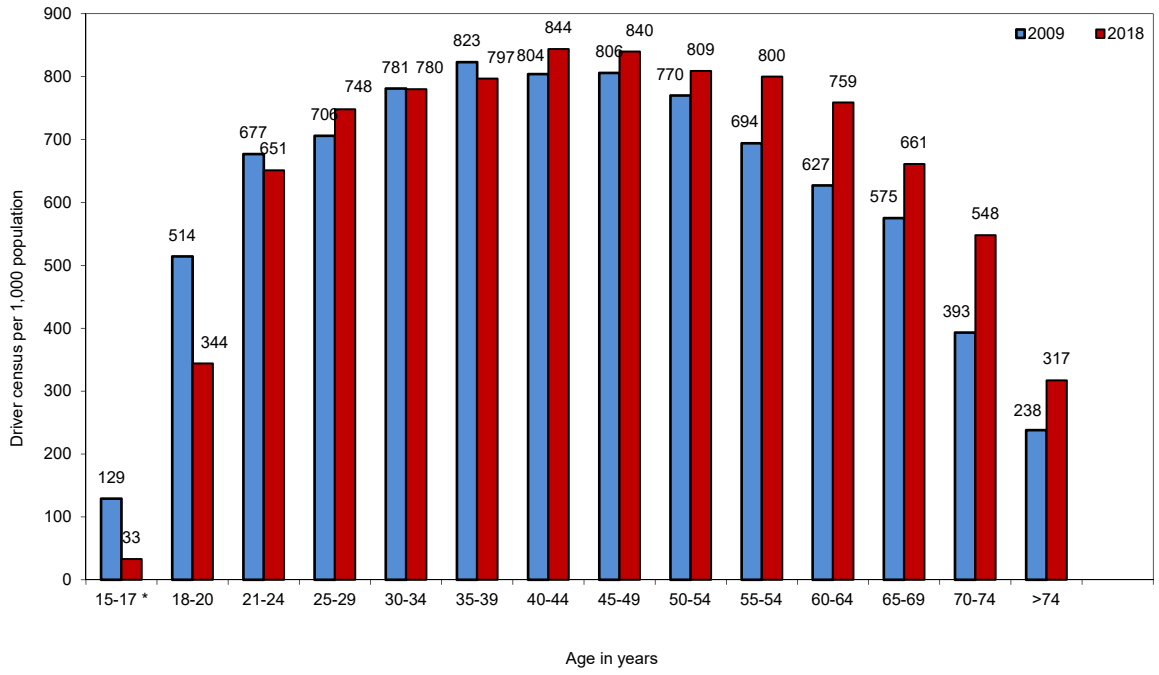
Table 5. Evolution of the registered drivers. Number of holders with at least one permit or driving licence. Spain, 2009-2018

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Difference 2018/2017	Year-on-year variation 2009-2018
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	26,853,754	204,301	0.5%

Table 6. Evolution of the rate of drivers per 1,000 population whose age qualifies for driving. Spain, 2008-2017

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
646	652	659	662	666	665	669	673	674	677

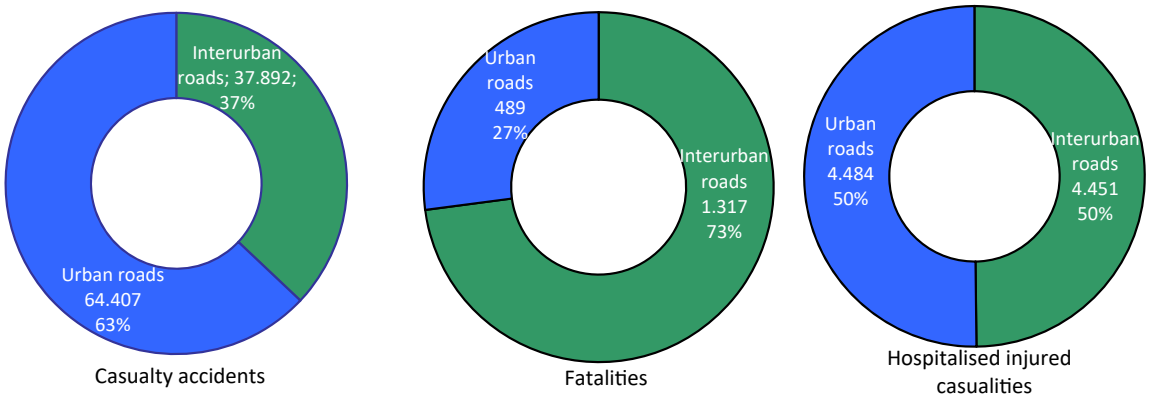
Figure 2. Registered drivers per 1,000 population whose age qualifies for driving. Spain, 2009-2018



3 The location of casualty accidents

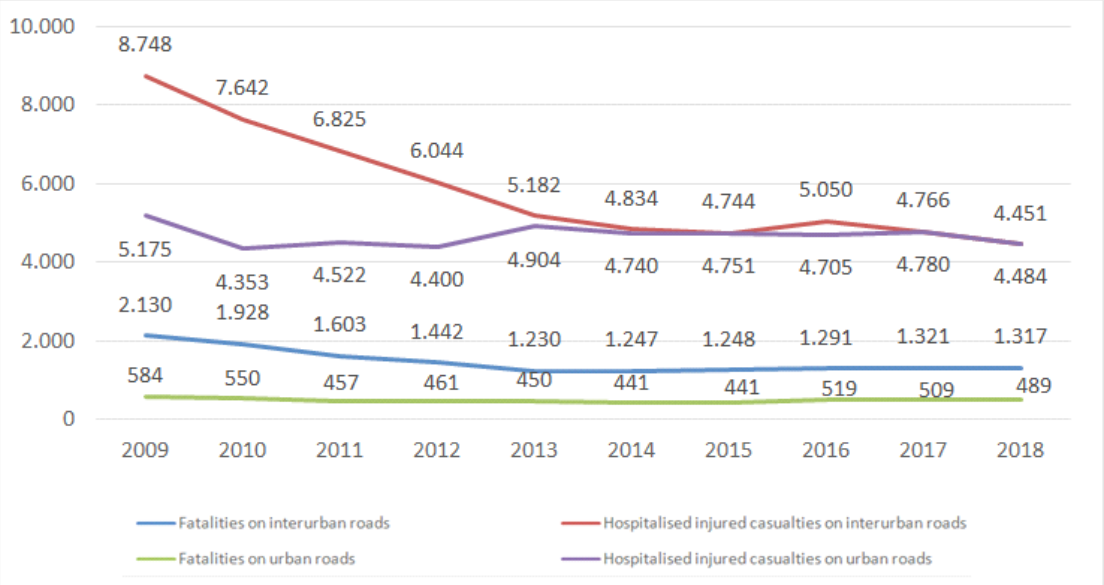
In 2018, most casualty accidents happened on urban roads; 63% of all road accidents occurred on this type of road. However, 73% of the fatalities are registered on interurban roads. As regards the number of hospitalised injured casualties, they are distributed in a similar proportion both on interurban and urban roads.

Figure 3. Distribution of casualty accidents, fatalities and hospitalised injured casualties by area. Spain, 2018



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 2018, fatalities on interurban roads increased by 6% and on urban roads by 11%; as regards 2017, there were 4 fewer fatalities on interurban roads and there were 20 fewer fatalities on urban roads, a decrease by 4%. In 2018, as for hospitalised injured casualties, there was a decrease by 7% on interurban roads and by 6% on urban roads.

Figure 4. Evolution of road fatalities and hospitalised injured casualties on interurban and urban roads. Spain 2009-2018



Interurban roads

In 2018, 37% of casualty accidents were recorded on interurban roads, totalling the figure of 37,892 accidents. 73% of fatalities (1,317 deaths) and 50% of hospitalised injured casualties (4,751 injured) resulted from those accidents.

In 2018 there have been 4 fewer road fatalities on interurban roads as compared to the previous year. On these roads, the number of hospitalised injured casualties decreased by 7% but non-hospitalised injured casualties increased by 1%.

For the past ten years, although the year over year reduction rate for fatalities was at 5%, 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 0.85 to 0.53 for the period 2009-2018.

Table 7. Evolution of casualty accidents on interurban roads. Spain, 2009-2018

Interurban roads	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Casualty accidents	40,789	39,174	35,878	35,425	37,297	35,147	34,558	36,721	37,493	37,892	1%	-1%
Fatalities	2,130	1,928	1,603	1,442	1,230	1,247	1,248	1,291	1,321	1,317	0%	-5%
Hospitalised casualties	8,748	7,642	6,825	6,044	5,182	4,834	4,744	5,050	4,766	4,451	-7%	-7%
Non-hospitalised injured casualties	54,180	52,247	47,692	47,936	51,320	48,693	48,036	51,379	52,340	53,124	1%	0%
Traffic vehicle-km 106 [1]	249,371	241,131	236,065	224,285	221,610	222,689	230,840	239,353	244,661	250,192	2%	0%
Fatalities per hundred million vehicle-km	0.85	0.80	0.68	0.64	0.56	0.56	0.54	0.54	0.54	0.53		

[1] *Source: Statistical Yearbooks of the Ministry of Development.*

Of the 37,892 accidents on interurban roads, 3,722 occurred on motorways, with 82 deaths, that is, 6% of the total figure for fatalities on interurban roads; there were 271 hospitalised injured casualties, that is 6%. 9,388 accidents were recorded on dual carriageways, with 241 deaths, accounting for 18% of all fatalities on interurban roads and 741 hospitalised injured casualties, which accounted for 17% of all hospitalised injured casualties on interurban roads. There were 994 fatalities on conventional roads, accounting for 75% of all fatalities on interurban roads; 3,439 injured casualties were hospitalised, which accounted for 77% of the total.

Table 8. Casualty accidents, fatalities, hospitalised and non-hospitalised injured casualties on interurban roads by road type. Spain, 2018

	Motorway	% Motorway	Dual c'way	% Dual c'way	Other roads	% Others	Total on interurban roads
Casualty accidents	3,722	10%	9,388	25%	24,782	65%	37,892
Fatalities	82	6%	241	18%	994	75%	1,317
Hospitalised casualties	271	6%	741	17%	3,439	77%	4,451
Non-hospitalised injured casualties	5,708	11%	14,548	27%	32,868	62%	53,124
Total casualties	6,061	10%	15,530	26%	37,301	63%	58,892

In 2018 there were 82 fatalities on motorways, 3 fewer fatalities than in 2017. On dual carriageways, 241 fatalities have been registered, 18 more than in 2017, which means an increase by 8%; in the rest of roads, with 994 fatalities, we can observe a decrease by 2%, 19 fewer fatalities than in 2017. Hospitalised injured casualties have decreased on motorways and rest of roads in 2018 as compared with 2017 - 5% and 8% respectively - and the figure has increased on dual carriageways - 2%.

Table 9. Evolution of casualty accidents on interurban roads by road type. Spain, 2013-2018*

Casualty accidents	2013	2014	2015	2016	2017	2018	2018/2017
Motorway	2,456	2,369	2,398	3,592	3,932	3,722	-5%
Dual c'way	8,712	8,411	8,431	8,641	8,608	9,388	9%
Other roads	26,129	24,367	23,729	24,488	24,953	24,782	-1%
Total Interurban	**37,297**	**35,147**	**34,558**	**36,721**	**37,493**	**37,892**	**1%**

** 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. In 2016 the data of catalogues of roads from Catalonia and the Basque Country updated to the corresponding year were uploaded into the National Register for Road Traffic Accident Victims.*

Table 10. Evolution of fatalities on interurban roads by road type. Spain, 2013-2018*

Fatalities	2013	2014	2015	2016	2017	2018	2018/2017(1)
Motorway	63	64	75	85	85	82	-3
Dual c'way	227	226	202	242	223	241	8%
Other roads	940	957	971	964	1,013	994	-2%
Total Interurban	**1,230**	**1,247**	**1,248**	**1,291**	**1,321**	**1,317**	**0%**

** 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. In 2016 the data of catalogues of roads from Catalonia and the Basque Country updated to the corresponding year were uploaded into the National Register for Road Traffic Accident Victims.*
(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 11. Evolution of hospitalised injured casualties on interurban roads by road type. Spain, 2013-2018*

Hospitalised casualties	2013	2014	2015	2016	2017	2018	2018/2017
Motorway	268	263	223	290	285	271	-5%
Dual c'way	815	758	741	830	728	741	2%
Other roads	4,099	3,813	3,780	3,930	3,753	3,439	-8%
Total Interurban	**5,182**	**4,834**	**4,744**	**5,050**	**4,766**	**4,451**	**-7%**

** 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. In 2016 the data of catalogues of roads from Catalonia and the Basque Country updated to the corresponding year were uploaded into the National Register for Road Traffic Accident Victims.*

Urban roads

In 2018, 64,407 casualty accidents occurred on urban roads, which resulted in 489 people being killed (27% of the total), 4,484 injured casualties required hospitalization and 76,550 did not. In comparison with the previous year, the number of casualty accidents has decreased by 1%, the number of fatalities by 4%, hospitalised injured casualties by 6% and non-hospitalised injured casualties by 1%.

Table 12. Evolution of casualty accidents on urban roads. Spain, 2009-2018

Urban roads	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Casualty accidents	47,462	46,329	47,149	47,690	52,222	56,423	63,198	65,641	64,740	64,407	-1%	3%
Fatalities	584	550	457	461	450	441	441	519	509	489	-4%	-2%
Hospitalised casualties	5,175	4,353	4,522	4,400	4,904	4,740	4,751	4,705	4,780	4,484	-6%	-2%
Non-hospitalised injured casualties	56,863	56,103	56,588	57,510	63,314	68,365	76,924	79,256	77,276	76,550	-1%	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 2018, 1,597 casualty accidents were recorded on sections of road running through towns, 4% fewer than in 2017, in which 43 persons were killed (-5), 169 injured casualties required hospitalization (+4%) and 1,883 injured casualties did not (-9%).

Table 13. 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, 2017-2018

Urban roads	Sections of road running through towns			Others		
	2017	2018	Variation 2018/2017 (1)	2017	2018	Variation 2018/2017
Casualty accidents	1,655	1,597	-4%	63,085	62,810	0%
Fatalities	48	43	-5	461	446	-3%
Hospitalised casualties	162	169	4%	4,618	4,315	-7%
Non-hospitalised injured casualties	2,073	1,883	-9%	75,203	74,667	-1%

(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. Municipal data

Madrid and Barcelona, two cities with a population of over a million inhabitants, have recorded 15% of fatalities and 25% of hospitalised injured casualties on urban roads. Cities with a population from 100,001 to 500,000 inhabitants - with 24% of the Spanish population - have recorded the highest number of fatalities and hospitalised injured casualties: that is, 25% and 29% of the total, respectively.

Table 14. Fatalities by size of the municipality. Spain, 2009-2018

Population size	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Dist. 2018
Fewer than 5,000 inhab.	64	49	49	48	46	38	47	44	43	45	9%
Between 5,000 and 20,000 inhab.	55	67	49	47	49	55	61	71	76	70	14%
Between 20,001 and 60,000 inhab.	69	60	55	65	61	72	63	68	95	70	14%
Between 60,001 and 100,000 inhab.	55	61	43	54	46	39	42	59	63	64	13%
Between 100,001 and 500,000 inhab.	137	149	121	110	128	123	127	149	138	121	25%
Between 500,001 and 1,000,000 inhab.	75	57	50	32	38	38	39	43	40	44	9%
Over a million inhab.	121	107	85	102	82	76	62	85	54	75	15%
Total	**584**	**550**	**457**	**461**	**450**	**441**	**441**	**519**	**509**	**489**	**100%**
Number of road traffic fatalities lacking a municipality code	8	0	5	3	0	0	0	0	0	0	
% of fatalities in road traffic accidents lacking a municipality code	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	

Table 15. Hospitalised injured casualties by size of the municipality. Spain, 2009-2018

Population size	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Dist. 2018
Fewer than 5,000 inhab.	245	202	250	178	227	206	205	199	183	194	4%
Between 5,000 and 20,000 inhab.	297	286	331	321	422	428	446	540	446	404	9%
Between 20,001 and 60,000 inhab.	450	470	534	590	673	633	737	649	642	575	13%
Between 60,001 and 100,000 inhab.	499	597	500	534	585	503	579	560	573	513	11%
Between 100,001 and 500,000 inhab.	1,115	1,103	1,003	1,027	1,279	1,164	1,254	1,281	1,316	1,312	29%
Between 500,001 and 1,000,000 inhab.	1,206	516	590	495	470	501	370	380	446	381	8%
Over a million inhab.	1,266	1,152	1,233	1,194	1,248	1,305	1,154	1,096	1,174	1,105	25%
Total	**5,175**	**4,353**	**4,522**	**4,400**	**4,904**	**4,740**	**4,751**	**4,705**	**4,780**	**4,484**	**100%**
Number of hospitalised injured casualties in road traffic accidents lacking a municipality code	97	27	81	61	0	0	6	0	0	0	
% of hospitalised injured casualties in road traffic accidents lacking a municipality code	2%	1%	2%	1%	0%	0%	0%	0%	0%	0%	

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 78% in 2009 to 93% in 2018.

Autonomous communities and provinces

The number of fatalities in road traffic accidents has decreased in 8 Autonomous Regions – Andalusia, the Balearic Islands, Castile-La Mancha, Extremadura, the Community of Madrid, the Region of Murcia, La Rioja and the Basque Country– in 2018 as compared with 2017. The number of fatalities has increased in the rest of the Autonomous Regions: the Canary Islands and Cantabria 1 more fatality, Aragón (+5), the Principality of Asturias and the Autonomous Community of Navarre (+6, respectively), the Valencian Community (+7), Castile and Leon (+12), Galicia (+27) and Catalonia (+43) fatalities. The autonomous cities of Ceuta and Melilla recorded 6 fatalities, 2 more than in 2017. As regards hospitalised injured casualties, the figure has decreased in 2018 as compared with 2017 in all the Autonomous Regions except in the Region of Murcia (+52) and Catalonia (+16).

Table 16. Evolution of fatalities by autonomous regions. Spain, 2009-2018

Autonomous regions	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017[1]	Year-on-year variation 2009-2018
Andalusia	449	399	327	295	283	287	262	303	305	274	-10%	-5%
Aragon	122	108	86	86	68	77	71	73	80	85	5	-4%
Asturias, Principality of	57	64	42	42	46	38	36	35	37	43	6	
Balearic, Islands	56	63	50	60	45	50	53	60	68	53	-15	
Canary Islands	72	76	47	61	48	57	62	71	67	68	1	
Cantabria	30	28	21	14	20	18	22	21	22	23	1	
Castile-La Mancha	195	172	152	140	120	107	107	118	129	100	-22%	-7%
Castile-Leon	270	286	228	189	160	157	181	175	164	176	7%	-5%
Catalonia	417	391	317	336	272	272	291	282	283	326	15%	-3%
Extremadura	95	85	76	62	47	56	54	62	62	51	-11	
Galicia	246	237	186	157	132	139	123	141	117	144	23%	-6%
Madrid, Community of	194	157	138	135	130	114	111	121	125	114	-9%	-6%
Murcia, Region of	88	61	71	50	57	61	44	58	85	66	-19	
Navarre, Autonomous Community of	39	39	28	44	31	41	26	26	29	35	6	
Rioja, La	34	22	22	13	16	11	20	25	26	10	-16	
Valencian Community	263	213	198	151	141	167	154	180	176	183	4%	-4%
Basque Country	83	75	69	68	63	36	67	56	51	49	-2	
Ceuta and Melilla	4	2	2	0	1	0	5	3	4	6	2	
Total	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1,806**	**-1%**	**-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 17. Evolution of hospitalised injured casualties by autonomous regions. Spain, 2009-2018

Autonomous regions	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017[(1)]	Year-on-year variation 2009-2018
Andalusia	2,362	1,972	1,864	1,553	1,615	1,345	1,281	1,453	1,372	1,284	-6%	-7%
Aragon	561	564	508	426	392	364	385	374	398	330	-17%	-6%
Asturias, Principality of	241	227	219	220	237	254	230	232	219	204	-7%	-2%
Balearic, Islands	310	286	304	311	374	340	389	344	389	310	-20%	0%
Canary Islands	393	331	289	292	300	362	347	391	413	401	-3%	0%
Cantabria	126	111	79	68	97	56	57	67	68	62	-6	-8%
Castile-La Mancha	761	771	633	518	443	365	377	425	375	339	-10%	-9%
Castile-Leon	1,363	1,116	1,060	924	746	657	738	736	658	603	-8%	-9%
Catalonia	2,011	1,955	1,829	1,938	1,867	1,851	1,876	1,800	1,678	1,694	1%	-2%
Extremadura	352	278	307	277	209	208	155	194	195	187	-4%	-7%
Galicia	980	1,035	822	806	679	697	733	764	691	622	-10%	-5%
Madrid, Community of	1,446	1,318	1,373	1,299	1,386	1,416	1,314	1,254	1,304	1,185	-9%	-2%
Murcia, Region of	321	230	242	159	162	173	219	241	233	285	22%	-1%
Navarre, Autonomous Community of	100	110	98	86	102	92	112	136	124	119	-4%	
Rioja, La	76	77	75	71	69	66	71	60	77	68	-9	
Valencian Community	1,890	1,091	1,176	1,056	950	919	786	865	864	783	-9%	-9%
Basque Country	585	488	438	404	428	387	391	389	452	428	-5%	-3%
Ceuta and Melilla	45	35	31	36	30	22	34	30	36	31	-5	
Total	**13,923**	**11,995**	**11,347**	**10,444**	**10,086**	**9,574**	**9,495**	**9,755**	**9,546**	**8,935**	**-6%**	**-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.

In 2018 the number of fatalities compared to 2017 increased in 26 provinces and decreased in 24. The autonomous cities of Ceuta and Melilla recorded, each of them, 1 more fatality than in 2017. It should be taken into account that the fatality trend in figures at provincial level is subject to fluctuations as they are small figures.

Table 18. Evolution of fatalities by provinces on interurban and urban roads. Spain, 2014-2018

Provinces	2014	2015	2016	2017	2018	Variation 2018/2017[1]	Variation 2018/2014[1]
Araba/Álava	5	10	13	11	15	4	10
Albacete	23	22	24	16	11	-5	-12
Alicante/Alacant	67	62	68	64	60	-4	-7
Almería	19	26	40	22	27	5	8
Ávila	12	16	12	11	16	5	4
Badajoz	40	37	38	36	32	-4	-8
Balearic, Islands	50	53	60	68	53	-15	3
Barcelona	159	128	131	145	163	12%	3%
Burgos	24	32	36	31	32	1	8
Cáceres	16	17	24	26	19	-7	3
Cádiz	41	32	41	34	36	2	-5
Castellón/Castelló	29	28	43	39	35	-4	6
Ciudad Real	19	27	30	33	25	-8	6
Córdoba	37	26	22	37	34	-3	-3
Coruña, A	55	47	58	51	64	13	9
Cuenca	17	16	15	18	20	2	3
Girona	27	41	55	47	55	8	28
Granada	49	43	27	33	31	-2	-18
Guadalajara	14	11	7	12	10	-2	-4
Gipuzkoa	16	38	17	27	13	-14	-3
Huelva	19	23	19	22	18	-4	-1
Huesca	24	17	21	25	27	2	3
Jaén	30	23	31	35	31	-4	1
León	32	39	25	22	35	13	3
Lleida	37	51	37	40	43	3	6
Rioja, La	11	20	25	26	10	-16	-1
Lugo	33	22	32	22	26	4	-7
Madrid	114	111	121	125	114	-9%	0%
Málaga	40	46	57	67	39	-28	-1
Murcia	61	44	58	85	66	-19	5
Navarra	41	26	26	29	35	6	-6
Ourense	18	11	15	13	19	6	1
Asturias	38	36	35	37	43	6	5
Palencia	12	6	13	13	11	-2	-1
Palmas, Las	31	22	40	30	39	9	8
Pontevedra	33	43	36	31	35	4	2
Salamanca	13	17	10	15	14	-1	1
S.C. Tenerife	26	40	31	37	29	-8	3
Cantabria	18	22	21	22	23	1	5
Segovia	19	16	16	10	12	2	-7
Sevilla	52	43	66	55	58	3	6
Soria	14	10	19	11	15	4	1
Tarragona	49	71	59	51	65	14	16
Teruel	14	16	9	18	10	-8	-4
Toledo	34	31	42	50	34	-16	0
Valencia/València	71	64	69	73	88	15	17
Valladolid	13	24	24	27	23	-4	10
Bizkaia	15	19	26	13	21	8	6
Zamora	18	21	20	24	18	-6	0
Zaragoza	39	38	43	37	48	11	9
Ceuta	0	3	2	2	3	1	3
Melilla	0	2	1	2	3	1	3
Total	**1,688**	**1,689**	**1,810**	**1,830**	**1,806**	**-1%**	**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.

As it can be seen in the chart below, for 2018 the national fatality rate per million inhabitants has been 39, noting that 17 provinces have a rate below the national rate, 20 provinces have a rate over the national rate within the interval of a standard deviation and 13 provinces exceed the national rate in a standard deviation.

Figure 5. Fatality rate per million population disaggregated by the province where the accident occurred. Spain, 2018

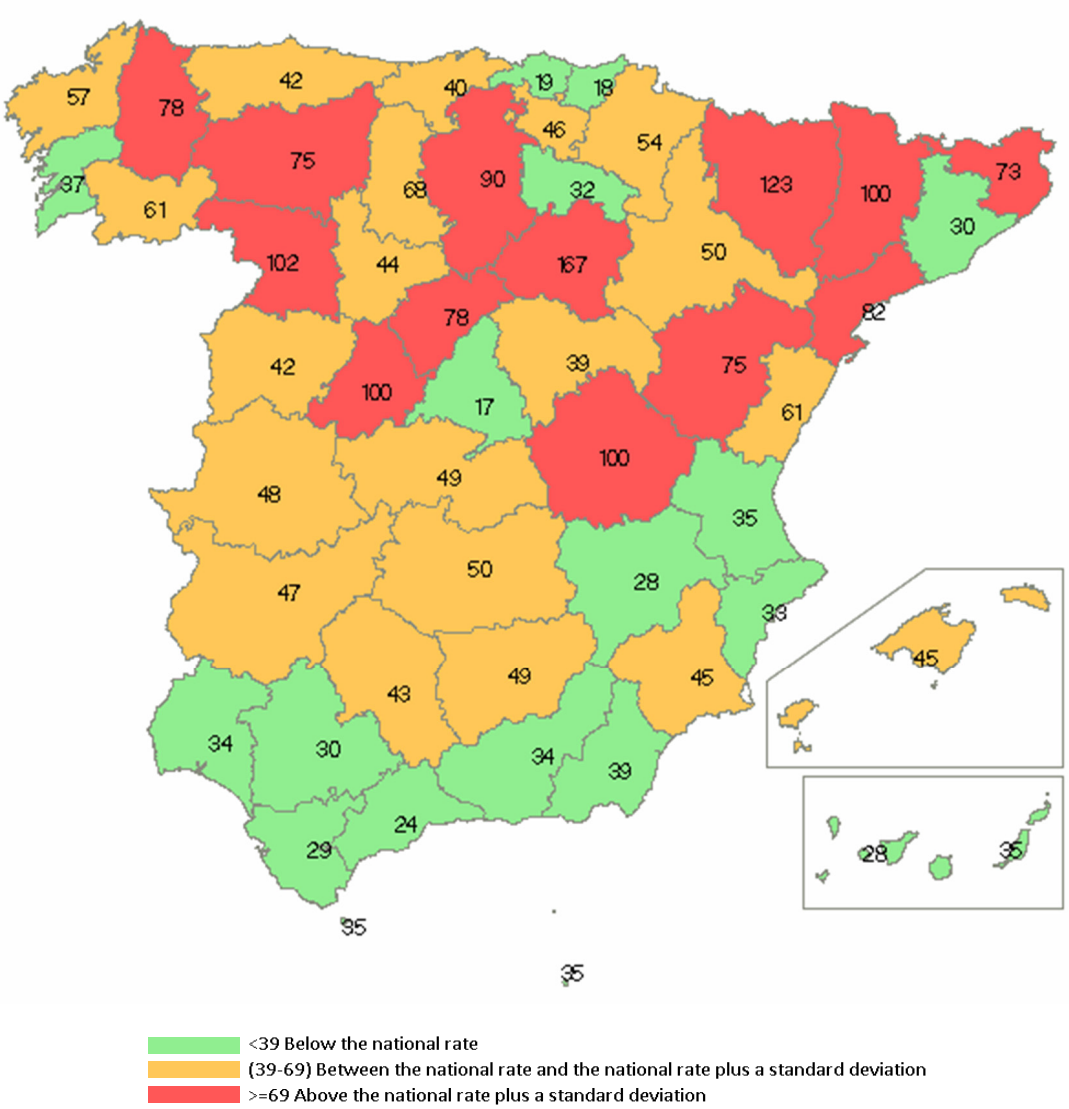


Table 19. Evolution of hospitalised injured casualties by provinces, on interurban and urban roads. Spain, 2014-2018

Provinces	2014	2015	2016	2017	2018	Variation 2018/2017[1]	Variation 2018/2014[1]
Araba/Álava	80	84	63	118	106	-10%	26
Albacete	101	83	95	99	90	-9	-11%
Alicante/Alacant	268	287	291	297	349	18%	30%
Almería	94	111	108	137	111	-19%	17
Ávila	71	66	60	39	52	13	-19
Badajoz	147	105	139	139	117	-16%	-20%
Balearic, Islands	340	389	344	389	310	-20%	-9%
Barcelona	1172	1145	1102	1036	1,049	1%	-10%
Burgos	123	140	149	120	109	-9%	-11%
Cáceres	61	50	55	56	70	14	9
Cádiz	202	229	211	224	206	-8%	2%
Castellón/Castelló	92	97	141	118	129	9%	37
Ciudad Real	79	61	77	63	46	-17	-33
Córdoba	151	118	151	115	122	6%	-19%
Coruña, A	226	234	304	312	275	-12%	22%
Cuenca	44	57	74	64	65	1	21
Girona	261	278	273	225	264	17%	1%
Granada	181	172	196	169	137	-19%	-24%
Guadalajara	24	48	40	42	29	-13	5
Gipuzkoa	202	199	203	186	171	-8%	-15%
Huelva	67	80	92	116	128	10%	61
Huesca	108	111	104	108	69	-36%	-36%
Jaén	119	92	114	81	92	11	-23%
León	100	170	189	167	133	-20%	33
Lleida	194	209	188	201	180	-10%	-7%
Rioja, La	66	71	60	77	68	-9	2
Lugo	100	141	114	107	85	-21%	-15
Madrid	1416	1314	1254	1304	1,185	-9%	-16%
Málaga	265	237	252	222	224	1%	-15%
Murcia	173	219	241	233	285	22%	65%
Navarra	92	112	136	124	119	-4%	27
Ourense	88	83	86	91	103	12	15
Asturias	254	230	232	219	204	-7%	-20%
Palencia	58	49	50	37	50	13	-8
Palmas, Las	131	145	130	115	95	-17%	-27%
Pontevedra	283	275	260	181	159	-12%	-44%
Salamanca	103	88	74	61	51	-10	-50%
S.C.Tenerife	231	202	261	298	306	3%	32%
Cantabria	56	57	67	68	62	-6	6
Segovia	38	46	38	41	40	-1	2
Sevilla	266	242	329	308	264	-14%	-1%
Soria	21	31	41	25	32	7	11
Tarragona	224	244	237	216	201	-7%	-10%
Teruel	53	45	61	64	59	-5	6
Toledo	117	128	139	107	109	2%	-7%
Valencia/València	559	402	433	449	305	-32%	-45%
Valladolid	105	104	92	116	86	-26%	-18%
Bizkaia	105	108	123	148	151	2%	44%
Zamora	38	44	43	52	50	-2	12
Zaragoza	203	229	209	226	202	-11%	0%
Ceuta	6	15	16	22	16	-6	10
Melilla	16	19	14	14	15	1	-1
Total	**9,574**	**9,495**	**9,755**	**9,546**	**8,935**	**-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.

4 The temporal component in casualty accidents

Months of the year

2018 resulted in a monthly average of 151 deaths in road traffic accidents, ranging the monthly figure from 119 deaths in April to 190 in July. July and August recorded 371 fatalities, a figure which accounts for 21% of the annual total fatalities. As compared with the previous year, there were decreases only in 7 months: March, April, May, June, September, October and November whereas the other 5 months of the year 2018 recorded increases as against the previous year.

Table 20. Fatalities by month of year. Spain, 2009-2018

Months	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
January	222	197	159	147	131	113	119	147	122	148	21%	-4%
February	208	148	142	141	137	99	113	136	131	137	5%	-5%
March	233	174	142	154	124	132	113	153	140	124	-11%	-7%
April	201	172	156	144	124	141	116	132	141	119	-16%	-6%
May	237	211	185	157	105	123	157	132	130	127	-2%	-7%
June	244	202	148	174	138	153	129	145	169	161	-5%	-5%
July	259	251	222	161	163	153	174	191	182	190	4%	-3%
August	274	258	216	190	171	156	164	188	152	181	19%	-5%
September	205	221	186	202	159	162	178	155	163	159	-2%	-3%
October	223	242	169	147	154	143	130	141	193	174	-10%	-3%
November	193	206	173	135	130	158	150	146	157	129	-18%	-4%
December	215	196	162	151	144	155	146	144	150	157	5%	-3%
Total	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1,806**	**-1%**	**-4%**
Monthly average	226	207	172	159	140	141	141	151	152	151		

Days of the week

66% of the road fatalities in 2018 occurred in accidents happening from Monday to Friday. Notwithstanding the above, Wednesday and Thursday were the days of the week recording fewer fatalities throughout the year (225 and 234 respectively).

Table 21. Road fatalities by day of the week. Spain, 2009-2018

Days of week	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Monday	347	323	282	238	226	234	244	265	259	238	-8%	-4%
Tuesday	312	303	252	238	220	206	215	215	255	239	-6%	-3%
Wednesday	342	313	280	246	187	205	209	243	219	225	3%	-5%
Thursday	354	337	248	253	263	224	186	250	247	234	-5%	-4%
Friday	384	374	287	273	259	245	255	261	267	261	-2%	-4%
Saturday	489	418	341	341	264	290	300	294	271	298	10%	-5%
Sunday	486	410	370	314	261	284	280	282	312	311	0%	-5%
Total	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1,806**	**-1%**	**-4%**

Times of the day

In 2018, 62% of the reported road fatalities occurred within the time frame between 08.00 and 19.59 hours. As compared with 2017, the number of road fatalities occurring during the slot 08.00 - 19.59 decreased by 2% and during the slot 20.00 - 07.59 there was no variation.

Table 22. Fatalities by time slot. Spain, 2009-2018

Time slots	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
08.00 - 19.59 h	1,663	1,509	1,253	1,203	1,101	1,056	1,093	1,158	1,151	1,125	-2%	-4%
20.00 - 07.59 h	1,051	969	807	700	579	632	596	652	679	681	0%	-5%
Total	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1,806**	**-1%**	**-4%**

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 hours from Monday to Friday.

Table 23. Road fatalities, injured casualties and case fatality rate by time slot and day of week. Spain, 2018

Time slots	Fatalities	Hospitalised casualties	Non-hospitalised injured casualties	Case fatality rate
Monday to Friday, 07.00 - 23.59 h	1,021	5,532	89,337	1.1
Saturday, Sunday and public holiday, 07.00 - 23.59 h	504	2,438	30,145	1.5
07.00 - 23.59 h	**1,525**	**7,970**	**119,482**	**1.2**
Tuesday to Friday, 24.00 - 06.59 h	112	345	3,998	2.5
Saturday, Sunday, Monday and public holiday, 24.00 - 06.59 h	169	620	6,194	2.4
24.00 - 06.59 h	**281**	**965**	**10,192**	**2.5**

5 Types of casualty accidents

Running off the road was the most commonly reported type of fatal accident in 2018, with 32% of all deaths, followed by accidents involving a pedestrian (21%) and head-on collisions (16%).

Table 24. Road fatalities by type of accident. Spain, 2009-2018

Type of Accident	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation(1) 2018/2017	Year-on-year variation 2009-2018
Run-off-road collision	903	752	646	663	508	548	522	601	601	582	-3%	-5%
Head-on collision	370	350	336	250	222	225	209	277	327	290	-11%	-3%
Side and T-bone collision	471	428	329	282	246	204	190	253	259	243	-6%	-7%
Rear and multiple collision	223	227	191	165	153	145	169	145	144	140	-3%	-5%
Pedestrian collision*	459	449	367	355	349	310	306	386	338	378	12%	-2%
Overturning	70	66	47	47	30	17	16	22	20	26	6	-44
Other type of accidents	218	206	144	141	172	239	277	126	141	147	4%	-4%
Total	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1,806**	**-1%**	**-4%**

**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.

On interurban roads, 38% of fatalities and 36% of hospitalised injured casualties occurred in run-off-road collisions. With respect to 2017, road traffic fatalities occurring in accidents listed as run-off-road have decreased by 3% and hospitalised injured casualties by 7%. In 2018, the number of people being killed when struck by a vehicle increased in 47 fatalities whereas the number of hospitalised injured casualties resulting from that type of accident decreased by 19%. The number of fatalities resulting from head-on collisions decreased by 8% whereas the number of hospitalised injured casualties resulting from that type of accident decreased by 1%.

Table 25. Road fatalities by type of accident. Interurban roads. Spain, 2009-2018

Type of Accident	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation (1) 2018/2017	Year-on-year variation 2009-2018
Run-off-road collision	834	690	578	594	441	476	464	524	519	506	-3%	-5%
Head-on collision	342	335	322	232	214	208	195	254	306	282	-8%	-2%
Side and T-bone collision	371	341	254	223	184	153	140	183	179	173	-3%	-8%
Rear and multiple collision	179	197	163	136	132	122	136	114	126	109	-13%	-5%
Pedestrian collision*	191	179	150	132	135	118	97	133	99	146	47	-3%
Overturning	55	48	38	30	26	11	12	17	16	19	3	-36
Other type of accidents	158	138	98	95	98	159	204	66	76	82	6	-7%
Total	**2,130**	**1,928**	**1,603**	**1,442**	**1,230**	**1,247**	**1,248**	**1,291**	**1,321**	**1,317**	**0%**	**-5%**

** 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 26. Hospitalised injured casualties by type of accident. Interurban roads. Spain, 2009-2018

Type of Accident	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation (1) 2018/2017	Year-on-year variation 2009-2018
Run-off-road collision	3,356	2,928	2,666	2,378	1,895	1,856	1,639	1,887	1,710	1,592	-7%	-8%
Head-on collision	1,247	1,062	947	781	655	571	545	834	788	778	-1%	-5%
Side and T-bone collision	1,756	1,552	1,371	1,158	1,008	698	716	898	922	798	-13%	-8%
Rear and multiple collision	993	911	806	633	647	502	518	590	531	511	-4%	-7%
Pedestrian collision*	352	348	284	277	223	229	191	230	216	176	-19%	-7%
Overturning	356	300	294	285	245	84	77	146	142	105	-26%	-13%
Other type of accidents	688	541	457	532	509	894	1,058	465	457	491	7%	-4%
Total	**8,748**	**7,642**	**6,825**	**6,044**	**5,182**	**4,834**	**4,744**	**5,050**	**4,766**	**4,451**	**-7%**	**-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.

On urban roads, 47% of fatalities and 36% 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 type of accident was side and T-bone collision (27%). With respect to

2017, the number of people being killed when struck by a vehicle on a urban road has decreased by 3% and hospitalised injured casualties resulting from that type of accident by 4%.

Table 27 Road fatalities by type of accident. Urban roads. Spain, 2009-2018

Type of Accident	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation (1) 2018/2017	Year-on-year variation 2009-2018
Run-off-road collision	69	62	68	69	67	72	58	77	82	76	-6	7
Head-on collision	28	15	14	18	8	17	14	23	21	8	-13	-20
Side and T-bone collision	100	87	75	59	62	51	50	70	80	70	-10	-30
Rear and multiple collision	44	30	28	29	21	23	33	31	18	31	13	-13
Pedestrian collision*	268	270	217	223	214	192	209	253	239	232	-3%	-2%
Overturning	15	18	9	17	4	6	4	5	4	7	3	-8
Other type of accidents	60	68	46	46	74	80	73	60	65	65	0	5
Total	**584**	**550**	**457**	**461**	**450**	**441**	**441**	**519**	**509**	**489**	**-4%**	**-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 28 Hospitalised injured casualties by type of accident. Urban roads. Spain, 2009-2018

Type of Accident	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation (1) 2018/2017	Year-on-year variation 2009-2018
Run-off-road collision	343	291	285	257	275	266	325	300	305	300	-2%	-1%
Head-on collision	139	124	101	144	132	134	150	131	128	135	5%	0%
Side and T-bone collision	1,742	1,270	1,330	1,233	1,308	1,259	1,187	1,343	1,351	1,225	-9%	-4%
Rear and multiple collision	602	450	493	482	534	515	489	438	500	455	-9%	-3%
Pedestrian collision*	1,586	1,591	1,603	1,563	1,670	1,557	1,633	1,727	1,690	1,621	-4%	0%
Overturning	201	161	195	176	189	113	87	114	109	102	-6%	-7%
Other type of accidents	562	466	515	545	796	896	880	652	697	646	-7%	2%
Total	**5,175**	**4,353**	**4,522**	**4,400**	**4,904**	**4,740**	**4,751**	**4,705**	**4,780**	**4,484**	**-6%**	**-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.

6 Road casualties

Gender and age

In 2018, there were 1,399 male fatalities and 407 female fatalities in road traffic accidents, therefore male casualties accounted for 77% of all fatalities and female casualties for 23%. The proportion by gender is similar on both interurban —80% males and 20% females— and urban roads — 71% males and 29% females—. Fatality rate per million population by gender was at 61 for males and at 17 for females.

As for hospitalised injured casualties, 70% were males, recording a higher percentage on interurban roads —74%— than on urban roads—67%—. As regards non-hospitalised injured casualties, 58% were males, there were practically no differences between interurban and urban roads.

Table 29. Fatalities, hospitalised and non-hospitalised injured casualties by gender. Spain, 2018

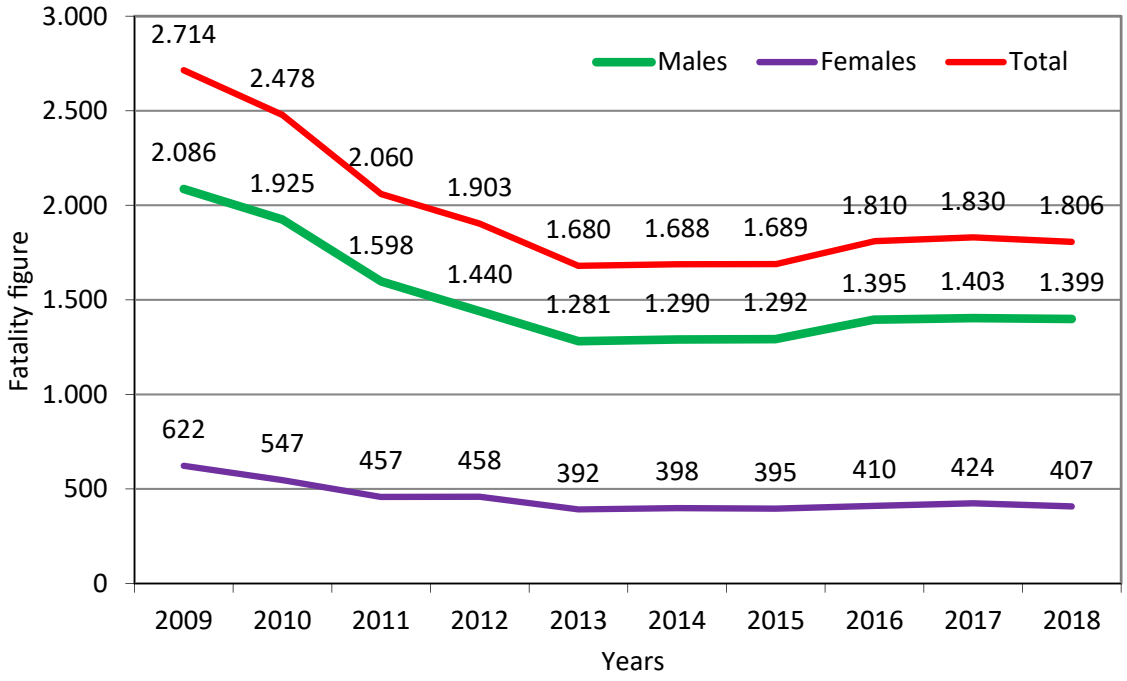
Sex	Total							
	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties		Case fatality rate	Total fatalities per million population
	Number	% Dist.	Number	% Dist.	Number	% Dist.		
Males	1,399	77%	6,257	70%	75,778	58%	1.7	61
Females	407	23%	2,653	30%	53,424	41%	0.7	17
Unspecified	0	0%	25	0%	472	0%	0.0	
Total	**1,806**	**100%**	**8,935**	**100%**	**129,674**	**100%**	**1.3**	**39**

Sex	Interurban roads						
	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties		Case fatality rate
	Number	% Dist.	Number	% Dist.	Number	% Dist.	
Males	1,052	80%	3,272	74%	30,943	58%	3.0
Females	265	20%	1,175	26%	22,117	42%	1.1
Unspecified	0	0%	4	0%	64	0%	0.0
Total	**1,317**	**100%**	**4,451**	**100%**	**53,124**	**100%**	**2.2**

Sex	Urban roads						
	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties		Case fatality rate
	Number	% Dist.	Number	% Dist.	Number	% Dist.	
Males	347	71%	2,985	67%	44,835	59%	0.7
Females	142	29%	1,478	33%	31,307	41%	0.4
Unspecified	0	0%	21	0%	408	1%	0.0
Total	**489**	**100%**	**4,484**	**100%**	**76,550**	**100%**	**0.6**

From 2009 to 2013 there was a clear reduction in the number of fatalities but, as of the year 2014 that decline was interrupted and fatality figure went up again. Males and females show a similar trend to that of the total fatalities.

Figure 6. Evolution of fatalities by gender. Spain, 2009-2018



In 2018, in absolute terms and considering the population as a whole, the 35-44 age group had a significantly higher number of people killed in road traffic accidents with 301 fatalities. That age group also showed the greatest number of hospitalised injured casualties: 1,634

Considering the percentage distribution of fatalities and hospitalised injured casualties by age group, 55% of fatalities and 48% of hospitalised injured casualties were 45 years of age or above.

On interurban roads, the 45-54 age group recorded the highest number: 242 fatalities. If hospitalised injured casualties are taken into account, the 35-44 age group showed the highest record, with 909 hospitalised casualties. 54% of the fatalities and 48% of the hospitalised injured casualties recorded on interurban roads were aged 45 or over.

On urban roads, the age group resulting in the highest record road death figure was the 35-44 age group with 79 fatalities. If hospitalised injured casualties are taken into account, the age group with the highest incidence is the 45-54 age group, with 746 hospitalised casualties. 51% of the fatalities and 33% 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 (54) is higher than the average age of those recorded on interurban roads (48). In the case of hospitalised injured casualties, the average age is similar in both road types, being 45 years on urban roads and 44 years on interurban roads; as for non-hospitalised injured casualties, the average age was 39 years on urban roads and 40 years on interurban roads.

Taking into account the fatality rate per million population, the 75-84 age group recorded the highest rate at 64 fatalities per million population, followed by the 85 and over age group with a rate at 61. The 25-34 age group ranks third, with 49 fatalities per million population. In 2018, children up to the age of 14 years presented a rate of 4 fatalities per million population.

Table 30. Fatalities by age group. Spain, 2018

Age groups	Total							
	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties		Case fatality rate	Total fatalities per million population
	Number	% Dist.	Number	% Dist.	Number	% Dist.		
0-14 years	25	1%	331	4%	6,350	5%	0.4	4
15-24 years	207	11%	1,169	13%	21,669	17%	0.9	46
25-34 years	261	14%	1,467	16%	27,630	21%	0.9	49
35-44 years	301	17%	1,634	18%	26,769	21%	1.0	40
45-54 years	288	16%	1,585	18%	20,571	16%	1.3	39
55-64 years	220	12%	1,130	13%	12,565	10%	1.6	37
65-74 years	217	12%	814	9%	6,580	5%	2.9	48
75-84 years	189	10%	554	6%	3,561	3%	4.4	64
85 and over	90	5%	162	2%	1,031	1%	7.0	61
Unspecified	8	0%	89	1%	2,948	2%	0.3	
Total	**1,806**	**100%**	**8,935**	**100%**	**129,674**	**100%**	**1.3**	**39**
Average age	50		45		39			

Age groups	Interurban roads						
	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties		Case fatality rate
	Number	% Dist.	Number	% Dist.	Number	% Dist.	
0-14 years	14	1%	120	3%	2,661	5%	0.5
15-24 years	162	12%	585	13%	8,542	16%	1.7
25-34 years	205	16%	727	16%	10,652	20%	1.8
35-44 years	222	17%	909	20%	11,375	21%	1.8
45-54 years	242	18%	839	19%	8,689	16%	2.5
55-64 years	163	12%	606	14%	5,488	10%	2.6
65-74 years	152	12%	387	9%	2,977	6%	4.3
75-84 years	117	9%	216	5%	1,510	3%	6.3
85 and over	37	3%	30	1%	347	1%	8.9
Unspecified	3	0%	32	1%	883	2%	0.3
Total	**1,317**	**100%**	**4,451**	**100%**	**53,124**	**100%**	2.2
Average age	48		44		40		

Age groups	Urban roads						
	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties		Case fatality rate
	Number	% Dist.	Number	% Dist.	Number	% Dist.	
0-14 years	11	2%	211	5%	3,689	5%	0.3
15-24 years	45	9%	584	13%	13,127	17%	0.3
25-34 years	56	11%	740	17%	16,978	22%	0.3
35-44 years	79	16%	725	16%	15,394	20%	0.5
45-54 years	46	9%	746	17%	11,882	16%	0.4
55-64 years	57	12%	524	12%	7,077	9%	0.7
65-74 years	65	13%	427	10%	3,603	5%	1.6
75-84 years	72	15%	338	8%	2,051	3%	2.9
85 and over	53	11%	132	3%	684	1%	6.1
Unspecified	5	1%	57	1%	2,065	3%	0.2
Total	**489**	**100%**	**4,484**	**100%**	**76,550**	**100%**	0.6
Average age	54		45		39		

As regards the number of fatalities by age group, and in comparison with 2017, decreases have been observed in the 0-14, 25-34, 45-54 and 55-64 age groups. The rest of age groups show an increase, and between them stand out the 65-74 age group, with an increase by 14% —26 more fatalities—, the 15-24 and 35-44 age groups, with an increase by 4% each group—7 and 12 more fatalities, respectively—, the 75-84 age group, with an increase by 2% —4 more fatalities— and the 85 and over age group, with one more fatality.

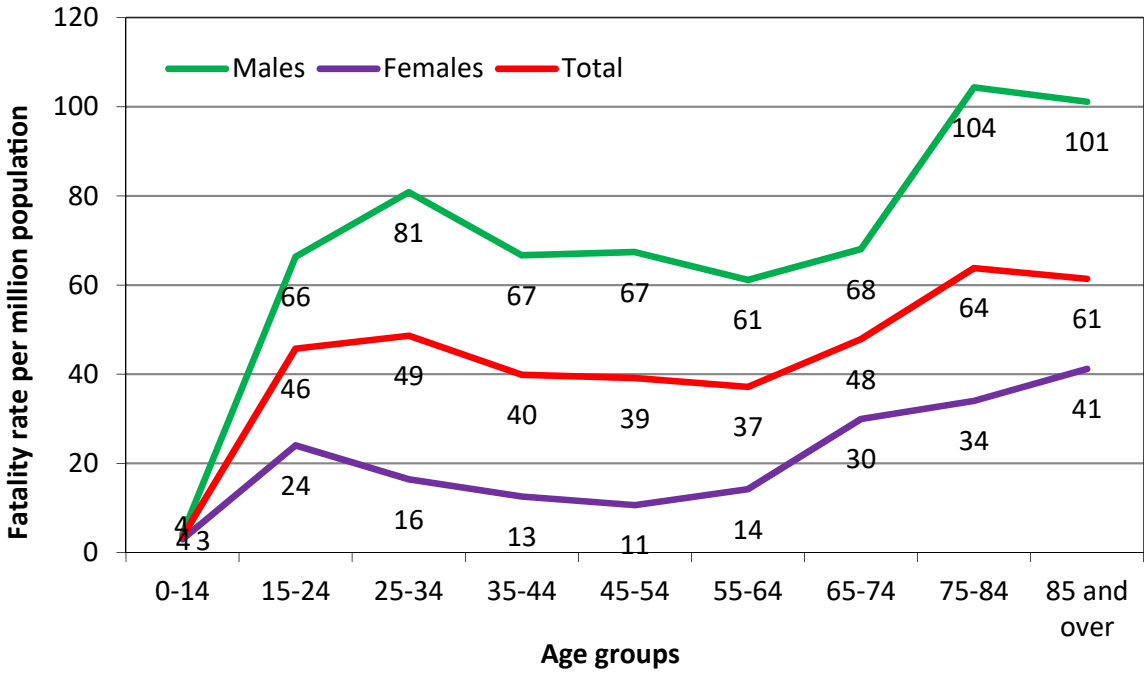
Table 31. Evolution of road traffic fatalities by age group. Spain, 2009-2018

Age groups	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation[1] 2018/2017	Year-on-year variation 2009-2018
0-14 years	60	79	42	52	46	37	25	28	35	25	-10	-35
15-24 years	434	363	263	206	163	154	170	198	200	207	4%	-8%
25-34 years	572	453	333	298	242	211	236	223	293	261	-11%	-8%
35-44 years	490	442	378	350	278	277	271	289	289	301	4%	-5%
45-54 years	368	346	313	274	250	298	262	311	291	288	-1%	-3%
55-64 years	256	248	229	200	202	216	210	230	246	220	-11%	-2%
65-74 years	230	240	200	196	200	188	202	198	191	217	14%	-1%
75-84 years	201	211	210	236	206	204	229	210	185	189	2%	-1%
85 and over	70	78	74	75	76	85	74	105	89	90	1	20
Unspecified	33	18	18	16	17	18	10	18	11	8	-3	-25
Total	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1,806**	**-1%**	**-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.

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 45-54 age group, in which the rate for males is six times as high as that among females, and in the 25-34 and 35-44 age groups, in which the rate for males is five 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 are found in the 25 to 64 years of age group, leading to an increase from the age of 65 years onwards.

Figure 7. Fatality rate by age and gender per million inhabitants. Spain, 2018



Drivers

A total of 174,976 drivers were involved in road traffic accidents in 2018, of which 62% occurred on urban roads. 73% of the drivers were males (males account for 58% of the total registered drivers), 59% of drivers were below 45 years of age and the majority of them were driving a car (62%).

A total of 1,153 drivers were killed in road traffic accidents in 2018; these drivers account for 64% of the total fatalities. 90% of the driver fatalities were males, 48% of them were below 45 years of age and 45% were driving a car. In addition, 80% of the drivers have been killed in accidents occurring on a interurban road.

63% of the hospitalised injured casualties in 2018 were drivers, namely 5,663. In the case of hospitalised injured drivers, they were mainly males — 85% —; below 45 years of age — 55% —; motorcycle riders — 44% —; and car drivers — 29% —. In addition, 56% of the hospitalised drivers were injured in accidents occurring on interurban roads.

Table 32. Drivers involved in casualty accidents, fatalities, hospitalised and non-hospitalised injured casualties by accident location. Spain, 2018

Type of road	Drivers involved		Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
Interurban roads	66,151	38%	921	80%	3,192	56%	34,929	42%
Urban roads	108,825	62%	232	20%	2,471	44%	48,999	58%
Total	**174,976**	**100%**	**1,153**	**100%**	**5,663**	**100%**	**83,928**	**100%**

Table 33. Drivers involved in casualty accidents, fatalities, hospitalised and non-hospitalised injured casualties by gender. Spain, 2018

Sex	Drivers involved		Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
Males	127,350	73%	1,040	90%	4,839	85%	58,211	69%
Females	46,144	26%	113	10%	816	14%	25,589	30%
Unknown	1,482	1%	0	0%	8	0%	128	0%
Total	**174,976**	**100%**	**1,153**	**100%**	**5,663**	**100%**	**83,928**	**100%**

Table 34. Drivers involved in casualty accidents, fatalities, hospitalised and non-hospitalised injured casualties by age group. Spain, 2018

Age	Drivers involved		Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
Age 0-14	388	0%	1	0%	29	1%	318	0%
15-24 years	22,023	13%	115	10%	689	12%	12,772	15%
Age 25-34	38,229	22%	201	17%	1,095	19%	20,690	25%
Age 35-44	42,641	24%	231	20%	1,305	23%	20,524	24%
Age 45-54	35,091	20%	230	20%	1,191	21%	15,333	18%
Age 55-64	20,070	11%	162	14%	756	13%	8,365	10%
65-74 years	8,834	5%	110	10%	377	7%	3,374	4%
Over 74 years	4,336	2%	96	8%	196	3%	1,640	2%
Unspecified	3,364	2%	7	1%	25	0%	912	1%
Total	**174,976**	**100%**	**1,153**	**100%**	**5,663**	**100%**	**83,928**	**100%**

Table 35. Drivers involved in casualty accidents, fatalities, hospitalised and non-hospitalised injured casualties by vehicle type. Spain, 2018

Vehicle type	Drivers involved		Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
Bicycle	8,008	5%	58	5%	619	11%	6,572	8%
Moped	7,131	4%	59	5%	482	9%	6,094	7%
Motorcycle	28,850	16%	338	29%	2,487	44%	24,073	29%
Car	108,840	62%	523	45%	1,668	29%	41,519	49%
Goods Veh.	17,083	10%	129	11%	291	5%	4,682	6%
Bus or coach	2,258	1%	3	0%	6	0%	121	0%
Other vehicles	2,806	2%	43	4%	110	2%	867	1%
Total	**174,976**	**100%**	**1,153**	**100%**	**5,663**	**100%**	**83,928**	**100%**

On interurban roads the number of drivers killed in an accident in 2018 has decreased by 3% as compared to 2017, whereas there has been an increase by 4% on urban roads. As regards hospitalised injured drivers, there has been a decrease by 5% in 2018 as compared to 2017 (5% on interurban roads and 6% on urban roads).

Table 36. Evolution of driver fatalities. Interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Interurban roads	1,433	1,278	1,099	977	805	836	884	865	947	921	-3%	-5%
Urban roads	259	233	193	185	209	207	164	236	224	232	4%	-1%
Total	**1,692**	**1,511**	**1,292**	**1,162**	**1,014**	**1,043**	**1,048**	**1,101**	**1,171**	**1,153**	**-2%**	**-4%**

Table 37. Evolution of hospitalised injured drivers. Interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Interurban roads	5,905	5,161	4,730	4,190	3,685	3,345	3,383	3,551	3,366	3,192	-5%	-7%
Urban roads	2,952	2,257	2,459	2,384	2,669	2,669	2,569	2,607	2,626	2,471	-6%	-2%
Total	**8,857**	**7,418**	**7,189**	**6,574**	**6,354**	**6,014**	**5,952**	**6,158**	**5,992**	**5,663**	**-5%**	**-5%**

Pedestrians

In 2018, 386 pedestrians were killed in road traffic accidents, accounting for 21% of total fatalities; 1,833 were hospitalised injured casualties, i.e. 21% of total hospitalised injured casualties; and 12,215 were non-hospitalised injured casualties, i.e. 9% of the corresponding total. On interurban roads a total of 149 pedestrians were killed, accounting for 39% of pedestrian fatalities; 190 pedestrians required admission to hospital, accounting for 10% of hospitalised injured pedestrians. On urban roads a total of 237 pedestrians were killed, accounting for 61% of all pedestrian fatalities; there were 13,308 injured pedestrians, of which 1,643 were admitted to hospital.

Table 38. Pedestrian fatalities, hospitalised and non-hospitalised injured pedestrians. Interurban and urban roads. Spain, 2018

Type of road	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
Interurban roads	149	39%	190	10%	550	5%
Urban roads	237	61%	1,643	90%	11,665	95%
Total	**386**	**100%**	**1,833**	**100%**	**12,215**	**100%**

As regards the gender of pedestrian fatalities, males represented the greatest percentage — 63% —, whereas in the case of hospitalised and non-hospitalised injured pedestrians, females accounted for a greatest percentage — 53% and 55% respectively —.

Table 39. Pedestrian fatalities, hospitalised and non-hospitalised injured pedestrians by gender. Interurban and urban roads. Spain, 2018

Sex	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
Males	245	63%	856	47%	5,359	44%
Females	141	37%	967	53%	6,739	55%
Unknown	0	0%	10	1%	117	1%
Total	**386**	**100%**	**1,833**	**100%**	**12,215**	**100%**

In 2018, 149 pedestrians were killed on interurban roads, of whom 30 were over 74 years of age — 20% —; and 29 were in the 45-54 age group — 19% —. As for hospitalised injured pedestrians, the 35-44 and 45-54 age groups showed the greatest percentage — 15% —. On urban roads 237 pedestrians were killed, 44% of whom were over 74 years of age and 22% of the pedestrians were in the 65-74 age group. As for hospitalised injured pedestrians, 23% were over 74 years of age and 18% were in the 65-74 age group.

Table 40. Pedestrian fatalities, hospitalised and non-hospitalised injured pedestrians by age group. Interurban roads. Spain, 2018

Age	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
From 0 to 14 y	1	1%	13	7%	51	9%
From 15 to 24 y	18	12%	16	8%	77	14%
From 25 to 34 y	13	9%	21	11%	56	10%
From 35 to 44 y	29	19%	29	15%	69	13%
From 45 to 54 y	25	17%	29	15%	87	16%
From 55 to 64 y	11	7%	27	14%	68	12%
From 65 to 74 y	22	15%	24	13%	75	14%
75 y and over	30	20%	27	14%	57	10%
Unknown	0	0%	4	2%	10	2%
Total	**149**	**100%**	**190**	**100%**	**550**	**100%**

Table 41. Pedestrian fatalities, hospitalised and non-hospitalised injured pedestrians by age group. Urban roads. Spain, 2018

Age	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
From 0 to 14 y	10	4%	168	10%	1,479	13%
From 15 to 24 y	7	3%	127	8%	1,556	13%
From 25 to 34 y	5	2%	110	7%	1,214	10%
From 35 to 44 y	19	8%	135	8%	1,413	12%
From 45 to 54 y	14	6%	197	12%	1,406	12%
From 55 to 64 y	25	11%	210	13%	1,377	12%
From 65 to 74 y	52	22%	288	18%	1,328	11%
75 y and over	104	44%	380	23%	1,481	13%
Unknown	1	0%	28	2%	411	4%
Total	**237**	**100%**	**1,643**	**100%**	**11,665**	**100%**

In 2018, the number of pedestrians killed on interurban roads increased by 45%, although to make an adequate assessment of this increase it should be taken into account that the number of pedestrians killed on interurban roads dropped by 25% in 2017. On urban roads, pedestrian fatalities dropped by 4% in 2018. As regards hospitalised injured pedestrians, in 2018 there was a decrease by 15% on interurban roads and by 4% on urban roads.

Table 42. Evolution of pedestrian fatalities. Interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Interurban roads	201	193	158	144	154	132	120	137	103	149	45%	-3%
Urban roads	269	278	222	232	224	204	247	252	248	237	-4%	-1%
Total	**470**	**471**	**380**	**376**	**378**	**336**	**367**	**389**	**351**	**386**	**10%**	**-2%**

Table 43. Evolution of hospitalised injured pedestrians. Interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Interurban roads	368	373	300	317	278	253	236	270	223	190	-15%	-7%
Urban roads	1,585	1,586	1,616	1,599	1,775	1,649	1,763	1,719	1,717	1,643	-4%	0%
Total	**1,953**	**1,959**	**1,916**	**1,916**	**2,053**	**1,902**	**1,999**	**1,989**	**1,940**	**1,833**	**-6%**	**-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 2009 they were involved in 20% of the accidents and in 2018 in 27% as well as pedal cycles, which were involved in 7% of the accidents in 2018 as against 4% in 2009. On the contrary, the percentage of accidents with at least one moped involved has dropped from 13% to 7% over that same period.

The following table shows the percentage of casualty accidents occurring on all types of roads in which there is, at least, one of the listed vehicles.

Table 44 Evolution of the distribution of casualty accidents by vehicle type (% of accidents involving at least a vehicle of the listed type). Spain, 2009-2018

Vehicle type	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bicycle	4%	4%	5%	6%	7%	8%	7%	7%	8%	7%
Moped	13%	11%	10%	9%	8%	8%	8%	8%	7%	7%
Motorcycle	20%	21%	22%	22%	22%	24%	25%	25%	27%	27%
Car	79%	80%	80%	80%	80%	77%	77%	77%	77%	77%
Van	9%	9%	9%	9%	9%	10%	10%	10%	11%	11%
Truck	7%	7%	6%	5%	5%	6%	6%	6%	6%	6%
Bus or coach	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Other vehicles	3%	3%	2%	3%	3%	2%	2%	2%	2%	2%
Pedestrian	12%	12%	13%	13%	13%	13%	14%	14%	14%	13%

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 2018 there have been decreases in the number of car fatalities (67 individuals), pedal cyclist fatalities (20 individuals) and goods vehicle fatalities (4 individuals). In the remaining modes of transport, the number of fatalities has increased, especially in the case of pedestrians (35 individuals), moped users (13 individuals), bus or coach (9 individuals) and other vehicles (10 individuals), except motorcycle users as the fatality figure was the same as that for the previous year (359 individuals).

Table 45. Evolution of road traffic fatalities by vehicle type. Spain, 2009-2018

Vehicle type	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation[1] 2018/2017	Year-on-year variation 2009-2018
Bicycle	56	67	49	72	69	75	58	67	78	58	-20	2
Moped	156	100	74	66	54	53	56	54	49	62	13	-10%
Motorcycle	438	386	348	302	301	287	329	343	359	359	0	-2%
Car	1,267	1,198	977	872	715	722	693	754	799	732	-9%	-6%
Van	147	104	87	83	52	100	85	69	90	81	-9	-6%
Truck	92	81	85	64	59	60	67	74	65	70	5	-22
Bus or coach	21	4	3	3	11	26	2	21	3	12	9	-9
Other vehicles	67	67	57	65	41	29	32	39	36	46	10	-21
Pedestrian	470	471	380	376	378	336	367	389	351	386	9%	-2%
Total fatalities	**2,714**	**2,478**	**2,060**	**1,903**	**1,680**	**1,688**	**1,689**	**1,810**	**1,830**	**1,806**	**-1%**	**-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 bel*

On interurban roads, cars are the vehicle type causing more fatalities — 663 in 2018—, followed by 241 motorcycle fatalities and by 149 pedestrian fatalities. In comparison with 2017, there has been a significant increase in the number of pedestrian fatalities (46 individuals), moped fatalities (9 individuals) and bus or coach fatalities (9 individuals). The most significant decreases have been found in car users (54 individuals), motorcycles (10 individuals), vans (10 individuals) and pedal cycles (6 individuals).

On urban roads, pedestrians are the group recording the highest number of fatalities — 237 in 2018—, followed by 118 motorcycle fatalities and 69 car fatalities. In comparison with 2017, there has been an increase in the number of motorcycle fatalities (10 individuals) and moped fatalities (4 individuals). There have been significant decreases in pedal cyclists (14 individuals), cars (13 individuals) and pedestrians (11 individuals).

In light of the above and, as illustrated by the following two charts, mopeds are the mode of transport showing a notable increase in the number of fatalities as compared to the previous year, both on urban and interurban roads, with 13 more fatalities. Cars and pedal cycles are the modes of transport with a considerable decrease in the number of fatalities, both on urban and interurban roads, as compared to 2017, with 67 and 20 fewer fatalities, respectively.

Table 46. Evolution of road traffic fatalities by vehicle type and type of road. Spain, 2009-2018

Vehicle type	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Interurban roads										
Bicycle	43	49	37	53	45	54	48	40	49	43
Moped	88	54	37	42	34	21	28	26	26	35
Motorcycle	325	279	251	208	203	188	247	234	251	241
Car	1,166	1,114	902	801	643	651	632	674	717	663
Van	140	101	82	81	49	95	76	66	84	74
Truck	90	79	81	62	58	57	66	68	62	66
Bus or coach	20	2	3	1	10	23	2	18	2	11
Other vehicles	57	57	52	50	34	26	29	28	27	35
Pedestrian	201	193	158	144	154	132	120	137	103	149
Total on interurban roads	**2,130**	**1,928**	**1,603**	**1,442**	**1,230**	**1,247**	**1,248**	**1,291**	**1,321**	**1,317**
Urban roads										
Bicycle	13	18	12	19	24	21	10	27	29	15
Moped	68	46	37	24	20	32	28	28	23	27
Motorcycle	113	107	97	94	98	99	82	109	108	118
Car	101	84	75	71	72	71	61	80	82	69
Van	7	3	5	2	3	5	9	3	6	7
Truck	2	2	4	2	1	3	1	6	3	4
Bus or coach	1	2	0	2	1	3	0	3	1	1
Other vehicles	10	10	5	15	7	3	3	11	9	11
Pedestrian	269	278	222	232	224	204	247	252	248	237
Total Urban Roads	**584**	**550**	**457**	**461**	**450**	**441**	**441**	**519**	**509**	**489**

In comparison with the previous year, in 2018 there have been widespread decreases in the number of hospitalised injured casualties: car occupants (202 individuals), pedestrians (107 individuals), motorcyclists (102 individuals), moped users (90 individuals), pedal cyclists (74 individuals) and goods vehicles (62 individuals). Bus or coach users are the only road user group recording an increase (29 individuals).

Table 47. Evolution of hospitalised injured casualties by vehicle type. Spain, 2009-2018

Vehicle type	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation[1] 2017/2016	Year-on-year variation 2008-2017
Bicycle	489	467	589	572	646	670	652	736	694	620	-12%	3%
Moped	1,464	1,015	958	771	818	638	669	625	618	528	-17%	-11%
Motorcycle	3,032	2,528	2,617	2,458	2,510	2,583	2,599	2,681	2,784	2,682	-4%	-1%
Car	5,699	4,985	4,344	3,921	3,326	2,993	2,831	2,988	2,864	2,662	-8%	-8%
Van	558	421	392	324	282	302	330	274	288	253	-14%	-8%
Truck	322	293	275	214	195	247	221	205	170	143	-19%	-9%
Bus or coach	123	77	65	43	74	124	49	83	47	76	29	-5%
Other vehicles	283	250	191	225	182	115	145	174	141	138	-2%	-7%
Pedestrian	1,953	1,959	1,916	1,916	2,053	1,902	1,999	1,989	1,940	1,833	-5%	-1%
Total hospitalised injured casualties	**13,923**	**11,995**	**11,347**	**10,444**	**10,086**	**9,574**	**9,495**	**9,755**	**9,546**	**8,935**	**-7%**	**-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.*

On interurban roads, in 2018 the greatest number of hospitalised injured casualties occurred in cars: 2,118 individuals were injured and required hospitalisation. Motorcyclists are the second group recording the highest number of hospitalised injured casualties with 1,229 individuals. In comparison with 2017, there have been more hospitalised injured bus or coach users (32 individuals). For the rest of road user groups, the decreases were as follows: car users — 177 individuals —; pedal cyclists — 42 individuals —; pedestrians — 33 individuals —; moped users — 29 individuals —; trucks exceeding 3,500kg — 26 individuals —; motorcyclists — 21 individuals —; vans — 15 individuals —; trucks not exceeding 3,500kg — 2 individuals —.

On urban roads, pedestrians are the road user group recording the highest number of hospitalised injured casualties — 1,643 in 2018—, followed by motorcyclists — 1,453 —. As compared with 2017, there have been fewer hospitalised injured casualties: motorcyclists (81 individuals), pedestrians (74 individuals), moped users (61 individuals), pedal cyclists (32 individuals), car users (25 individuals), van users (20 individuals), bus or coach users (3 individuals) and trucks exceeding 3500 kg (1 individual). Trucks not exceeding 3500 kg were only mode of transport recording an increase in the number of hospitalised injured occupants (2 individuals).

In light of the above and, as illustrated by the following two charts, no mode of transport has shown an increase in the number of hospitalised injured casualties as compared to the previous year, both on urban and interurban roads. All modes of transport, except trucks not exceeding 3500 kg and bus or coach, recorded decreases in the number of hospitalised injured casualties on both types of roads.

Table 48. Evolution of road traffic fatalities by vehicle type and type of road. Spain, 2009-2018

Vehicle type	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Interurban roads										
Bicycle	268	258	304	304	297	312	322	356	338	296
Moped	605	406	374	279	267	156	198	167	166	137
Motorcycle	1,619	1,431	1,377	1,252	1,152	1,125	1,180	1,214	1,250	1,229
Car	4,808	4,325	3,691	3,236	2,595	2,341	2,238	2,456	2,295	2,118
Van	504	379	352	292	247	263	278	242	238	223
Truck	303	271	262	203	184	221	207	187	164	136
Bus or coach	75	25	23	12	28	91	3	53	8	40
Other vehicles	198	174	142	149	134	72	82	105	84	82
Pedestrian	368	373	300	317	278	253	236	270	223	190
Total on interurban roads	**8,748**	**7,642**	**6,825**	**6,044**	**5,182**	**4,834**	**4,744**	**5,050**	**4,766**	**4,451**
Urban roads										
Bicycle	221	209	285	268	349	358	330	380	356	324
Moped	859	609	584	492	551	482	471	458	452	391
Motorcycle	1,413	1,097	1,240	1,206	1,358	1,458	1,419	1,467	1,534	1,453
Car	891	660	653	685	731	652	593	532	569	544
Van	54	42	40	32	35	39	52	32	50	30
Truck	19	22	13	11	11	26	14	18	6	7
Bus or coach	48	52	42	31	46	33	46	30	39	36
Other vehicles	85	76	49	76	48	43	63	69	57	56
Pedestrian	1,585	1,586	1,616	1,599	1,775	1,649	1,763	1,719	1,717	1,643
Total urban roads	**5,175**	**4,353**	**4,522**	**4,400**	**4,904**	**4,740**	**4,751**	**4,705**	**4,780**	**4,484**

Pedal cyclists

In 2018 pedal cyclists were involved in 7,598 accidents in which 58 cyclists were killed, 620 were hospitalised injured casualties and 6,633 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 70%. However, the greatest number of pedal cyclist fatalities occurred on interurban roads, resulting in 43 deaths; on urban roads there were 15 deaths.

Males are, by far, the group who have mainly suffered the consequences of road traffic accidents involving a bicycle: 53 out of the 58 pedal cyclist fatalities were males, as it was the case for 87% of the hospitalised injured casualties and 81% of non-hospitalised injured casualties.

In 2018, the 55-64 age group records the highest pedal cyclist fatality figure (15), followed by the 75+ age group (12). As for hospitalised injured casualties, the age groups showing the highest number of casualties in this category were the 35-44 age group (21%) and the 45-54 age group (21%).

In 2018 there were 20 fewer pedal cyclist fatalities than in 2017; distributed as follows: 6 pedal cyclists fewer on interurban roads and 14 fewer on urban roads. As regards hospitalised injured pedal cyclists, there has been a decrease by 11% in all types of roads.

Table 49. Road traffic casualty accidents involving a pedal cycle on urban and interurban roads. Spain, 2018

Type of road	Casualty accidents		Fatalities*	Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	Number	%	Number	%
Interurban roads	2,143	28%	43	296	48%	1,962	30%
Urban roads	5,455	72%	15	324	52%	4,671	70%
Total	**7,598**	**100%**	**58**	**620**	**100%**	**6,633**	**100%**

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

Table 50. Cyclist fatalities and injured casualties by gender. Spain, 2018

Sex	Fatalities*	Hospitalised casualties		Non-hospitalised injured casualties	
	Number	Number	%	Number	%
Males	53	542	87%	5,348	81%
Females	5	77	12%	1,247	19%
Unspecified		1	0%	38	1%
Total	**58**	**620**	**100%**	**6,633**	**100%**

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

Table 51. Cyclist fatalities and injured casualties by age group. Spain, 2018

Age group	Fatalities*	Hospitalised casualties		Non-hospitalised injured casualties	
	Number	Number	%	Number	%
0-14 years	1	26	4%	304	5%
15-24 years	3	46	7%	1,166	18%
25-34 years	3	76	12%	1,233	19%
35-44 years	6	133	21%	1,402	21%
45-54 years	9	133	21%	1,169	18%
55-64 years	15	114	18%	705	11%
65-74 years	9	63	10%	388	6%
75 and over	12	27	4%	131	2%
Unspecified	0	2	0%	135	2%
Total	**58**	**620**	**100%**	**6,633**	**100%**

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

Table 52 Evolution of cyclist fatalities on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017
Interurban roads	43	49	37	53	45	54	48	40	49	43	-6
Urban roads	13	18	12	19	24	21	10	27	29	15	-14
Total	**56**	**67**	**49**	**72**	**69**	**75**	**58**	**67**	**78**	**58**	**-20**

Table 53. Evolution of hospitalised injured cyclists on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Interurban roads	268	258	304	304	297	312	322	356	338	296	-12%	1%
Urban roads	221	209	285	268	349	358	330	380	356	324	-9%	4%
Total	**489**	**467**	**589**	**572**	**646**	**670**	**652**	**736**	**694**	**620**	**-11%**	**3%**

Moped users

In 2018 the number of casualty accidents involving a moped was 7,087, accounting for 7% of the total, two percentage points above the figure corresponding to mopeds in the 2018 vehicle fleet.

The majority of accidents involving a moped occurred on urban roads: 6,184 accidents, accounting for 87% of them, and reporting the highest number of hospitalised and non- hospitalised injured casualties (74% and 88% respectively). As regards fatalities, the distribution is equitable: 35 on interurban roads and 27 on urban roads.

Males represent a majority of the casualties among moped users: 55 out of the 62 moped fatalities were males, as it was the case for 79% of the hospitalised injured casualties and 70% of non-hospitalised injured casualties. The 15-24 age group recorded the highest number of hospitalised and non-hospitalised injured moped users. Fatality figure for this group was 16 individuals.

In 2018 there were more moped user fatalities (13) and fewer hospitalised injured casualties (15%) than in 2017. The figure has decreased by 17% on interurban roads and by 13% on urban roads.

Table 54. Road traffic casualty accidents involving a moped on urban and interurban roads. Spain, 2018

Type of road	Casualty accidents		Fatalities*	Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	Number	%	Number	%
Interurban roads	903	13%	35	137	26%	821	12%
Urban roads	6,184	87%	27	391	74%	6,015	88%
Total	**7,087**	**100%**	**62**	**528**	**100%**	**6,836**	**100%**

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

Table 55. Moped fatalities and injured casualties by gender. Spain, 2018

Sex	Fatalities*	Hospitalised casualties		Non-hospitalised injured casualties	
	Number	Number	%	Number	%
Males	55	418	79%	4,766	70%
Females	7	108	20%	2,051	30%
Unspecified		2	0%	19	0%
Total	**62**	**528**	**100%**	**6,836**	**100%**

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

Table 56. Moped fatalities and injured casualties by age group. Spain, 2018

Age group	Fatalities*	Hospitalised casualties		Non-hospitalised injured casualties	
	Number	Number	%	Number	%
0-14 years	0	6	1%	44	1%
15-24 years	16	164	31%	2,819	41%
25-34 years	6	91	17%	1,423	21%
35-44 years	7	85	16%	968	14%
45-54 years	10	62	12%	788	12%
55-64 years	11	57	11%	365	5%
65-74 years	7	37	7%	178	3%
75 and over	5	21	4%	114	2%
Unspecified		5	1%	137	2%
Total	**62**	**528**	**100%**	**6,836**	**100%**

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

Table 57 Evolution of moped fatalities on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017
Interurban roads	88	54	37	42	34	21	28	26	26	35	9
Urban roads	68	46	37	24	20	32	28	28	23	27	4
Total	**156**	**100**	**74**	**66**	**54**	**53**	**56**	**54**	**49**	**62**	**13**

Table 58. Evolution of hospitalised injured moped users on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Interurban roads	605	406	374	279	267	156	198	167	166	137	-17%	-15%
Urban roads	859	608	584	492	551	482	471	458	452	391	-13%	-8%
Total	**1,464**	**1,014**	**958**	**771**	**818**	**638**	**669**	**625**	**618**	**528**	**-15%**	**-11%**

Motorcyclists

In 2018 motorcycle users represented 27% of the total casualty accidents, i.e they were involved in 27,967 accidents whereas the percentage of motorcycles in the vehicle fleet was 10%. 76% of the casualty accidents involving motorcycles occurred on urban roads where 54% of hospitalised injured and 77% of non-hospitalised injured motorcyclists happened.

Meanwhile, fatal injuries occurred more frequently on interurban roads: 67% 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 73% of fatalities and 72% of the hospitalised and 72% of the non-hospitalised injured casualties, respectively.

In 2018, there has been a decrease by 4% in the number of motorcyclist fatalities on interurban roads, with a 2% decrease in the number of hospitalised injured casualties as compared to 2017. There have been 10 more motorcyclist deaths on urban roads and a 5% fall in the number of hospitalised injured casualties as against the previous year.

Table 59. Road traffic casualty accidents involving a motorcycle on urban and interurban roads. Spain, 2018

Type of road	Casualty accidents		Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
Interurban roads	6,851	24%	241	67%	1,229	46%	6,120	23%
Urban roads	21,116	76%	118	33%	1,453	54%	20,400	77%
Total	**27,967**	**100%**	**359**	**100%**	**2,682**	**100%**	**26,520**	**100%**

Table 60. Motorcycle fatalities and injured casualties by gender. Spain, 2018

Sex	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
Males	334	93%	2,366	88%	20,927	79%
Females	25	7%	313	12%	5,558	21%
Unspecified	0	0%	3	0%	35	0%
Total	**359**	**100%**	**2,682**	**100%**	**26,520**	**100%**

Table 61. Motorcycle fatalities and injured casualties by age group. Spain, 2018

Age group	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
0-14 years	0	0%	13	0%	132	0%
15-24 years	36	10%	279	10%	3,592	14%
25-34 years	79	22%	612	23%	7,589	29%
35-44 years	94	26%	663	25%	6,384	24%
45-54 years	90	25%	638	24%	5,152	19%
55-64 years	48	13%	355	13%	2,652	10%
65-74 years	8	2%	89	3%	509	2%
75 and over	2	1%	13	0%	94	0%
Unspecified	2	1%	20	1%	416	2%
Total	**359**	**100%**	**2,682**	**100%**	**26,520**	**100%**

Table 62 Evolution of motorcycle fatalities on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Interurban roads	325	279	251	208	203	188	247	234	251	241	-4%	-3%
Urban roads	113	107	97	94	98	99	82	109	108	118	9%	0%
Total	**438**	**386**	**348**	**302**	**301**	**287**	**329**	**343**	**359**	**359**	**0**	**-2%**

Table 63. Evolution of hospitalised injured motorcyclists on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Interurban roads	1,619	1,431	1,377	1,252	1,152	1,125	1,180	1,214	1,250	1,229	-2%	-3%
Urban roads	1,413	1,097	1,240	1,206	1,358	1,458	1,419	1,467	1,534	1,453	-5%	1%
Total	**3,032**	**2,528**	**2,617**	**2,458**	**2,510**	**2,583**	**2,599**	**2,681**	**2,784**	**2,682**	**-4%**	**-1%**

Car users

Car users were involved in 78,314 casualty accidents, that is, in 77% of the accidents recorded in 2018; cars account for 68% in the Spanish vehicle fleet. Of the 1,806 road traffic deaths that occurred in 2018, 41% (732 fatalities) were travelling in a car, either as drivers or passengers. As for the 8,935 hospitalised injured casualties as a result of a road traffic accident, 30% (2,662) were car occupants and of the 129,674 non-hospitalised injured casualties, 52% (67,153) were travelling in this type of vehicle.

62% of the casualty accidents involving at least one car occurred on urban roads; however, 91% (663 individuals) of car fatalities, 80% of hospitalised injured casualties and 56% of non-hospitalised injured casualties occurred on interurban roads.

71% of car occupants killed were males, a percentage that dropped to 61% in the case of hospitalised injured casualties and to 48% in the case of non-hospitalised injured casualties. The 25-34 age group — 17% — and the 15-24 and 35-44 age groups registered the highest fatality rate (16% and 15% respectively) for cars. The 15-24 age group recorded the greatest number of hospitalised injured casualties (18%) and the 25-34 and 35-44 age groups recorded the greatest number of non-hospitalised injured casualties (21% each group).

Car fatalities decreased by 8% on interurban roads in 2018 as compared to 2017; as for hospitalised injured casualties, there was also a decrease by 8% on this type of road. On urban roads, the number of fatalities has decreased by 13 individuals as compared to 2017 and the number of hospitalised injured casualties also decreased by 25 individuals.

Table 64. Road traffic casualty accidents involving cars on urban and interurban roads. Spain, 2018

Type of road	Casualty accidents		Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%	Number	%
Interurban roads	29,609	38%	663	91%	2,118	80%	37,904	56%
Urban roads	48,705	62%	69	9%	544	20%	29,249	44%
Total	**78,314**	**100%**	**732**	**100%**	**2,662**	**100%**	**67,153**	**100%**

Table 65. Car fatalities and injured casualties by gender. Spain, 2018

Sex	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
Males	523	71%	1,622	61%	32,504	48%
Females	209	29%	1,033	39%	34,427	51%
Unspecified	0	0%	7	0%	222	0%
Total	**732**	**100%**	**2,662**	**100%**	**67,153**	**100%**

Table 66. Car fatalities and injured casualties by age group. Spain, 2018

Age group	Fatalities		Hospitalised casualties		Non-hospitalised injured casualties	
	Number	%	Number	%	Number	%
0-14 years	11	2%	94	4%	3,941	6%
15-24 years	114	16%	480	18%	11,518	17%
25-34 years	121	17%	461	17%	14,371	21%
35-44 years	110	15%	462	17%	14,098	21%
45-54 years	95	13%	372	14%	9,958	15%
55-64 years	77	11%	294	11%	6,119	9%
65-74 years	97	13%	270	10%	3,402	5%
75 and over	103	14%	208	8%	2,167	3%
Unspecified	4	1%	21	1%	1,579	2%
Total	**732**	**100%**	**2,662**	**100%**	**67,153**	**100%**

Table 67 Evolution of car fatalities on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation[1] 2018/2017	Year-on-year variation 2009-2018
Interurban roads	1,162	1,113	902	801	643	651	632	674	717	663	-8%	-6%
Urban roads	101	84	75	71	72	71	61	80	82	69	-13	-4%
Total	**1,263**	**1,197**	**977**	**872**	**715**	**722**	**693**	**754**	**799**	**732**	**-8%**	**-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 68. Evolution of hospitalised injured car users on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017	Year-on-year variation 2009-2018
Interurban roads	4,791	4,320	3,691	3,236	2,595	2,341	2,238	2,456	2,295	2,118	-8%	-9%
Urban roads	891	661	683	685	731	652	593	532	569	544	-4%	-5%
Total	**5,682**	**4,981**	**4,374**	**3,921**	**3,326**	**2,993**	**2,831**	**2,988**	**2,864**	**2,662**	**-7%**	**-8%**

Users of vehicles for the transport of goods and passengers

Van users

In 2018 vans were involved in 10,844 casualty accidents, of which 57% occurred on urban roads. However, the highest number of van occupants killed occurred on interurban roads: 74 of the 81 occupants killed lost their lives on this type of road. 88% of the hospitalised injured van occupants occurred on interurban roads.

As for third-party fatalities (occupants of other types of vehicles or pedestrians) involved in van accidents, 118 of the 153 fatalities occurred on interurban roads.

In 2018, there were 9 fewer van fatalities than in 2017, whereas the number of hospitalised injured casualties decreased by 12%. Hospitalised injured casualties decreased on both types of roads and fatalities decreased on interurban roads (10 individuals) as compared to the previous year.

Table 69. Road traffic casualty accidents involving a van on urban and interurban roads. Spain, 2018

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	4,647	43%	192	82%	74	118	77%	223	88%	3,474	67%
Urban roads	6,197	57%	42	18%	7	35	23%	30	12%	1,740	33%
Total	**10,844**	**100%**	**234**	**100%**	**81**	**153**	**100%**	**253**	**100%**	**5,214**	**100%**

Table 70. Evolution of van fatalities on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017
Interurban roads	140	101	82	81	49	95	76	66	84	74	-10
Urban roads	7	3	5	2	3	5	9	3	6	7	1
Total	**147**	**104**	**87**	**83**	**52**	**100**	**85**	**69**	**90**	**81**	**-9**

Table 71. Evolution of hospitalised injured van users on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation[1] 2018/2017	Year-on-year variation 2009-2018
Interurban roads	504	379	352	292	247	263	278	242	238	223	-6%	-9%
Urban roads	54	42	40	32	35	39	52	32	50	30	-20	-24
Total	**558**	**421**	**392**	**324**	**282**	**302**	**330**	**274**	**288**	**253**	**-12%**	**-8%**

[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 2018, trucks with a MAM not exceeding 3500 kg were involved in 1,622 casualty accidents; its incidence was similar to the accidents occurring on urban roads (52%) and on interurban roads (48%).

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 (11 fatalities, 30 hospitalised and 416 non-hospitalised injured casualties). On urban roads, there was 1 occupant fatality and 3 hospitalised injured occupant casualties. As for third-party fatalities (occupants in other vehicles or pedestrians, in an accident in which there was a truck of this category involved), there were 21 fatalities on interurban roads and 6 on urban roads.

As compared to 2017, there were 4 more fatalities and 44 fewer hospitalised injured casualties on interurban roads in 2018; 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 3 hospitalised injured casualties in 2018.

Table 72. Casualty accidents involving trucks with a MAM not exceeding 3500 kg on interurban and urban roads. Spain, 2018

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	841	52%	32	11	21	30	416	71%
Urban roads	781	48%	7	1	6	3	170	29%
Total	**1,622**	**100%**	**39**	**12**	**27**	**33**	**586**	**100%**

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

Table 73. Evolution of the fatalities occurring in trucks with a MAM not exceeding 3500 kg on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017
Interurban roads	21	11	10	12	16	11	8	18	7	11	4
Urban roads	2	0	2	2	0	1	0	1	1	1	0
Total	**23**	**11**	**12**	**14**	**16**	**12**	**8**	**19**	**8**	**12**	**4**

Table 74. Evolution of the fatalities occurring in trucks with a MAM not exceeding 3500 kg on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017
Interurban roads	74	82	64	45	41	52	32	41	32	30	-44
Urban roads	13	12	7	9	5	13	4	6	1	3	-10
Total	**87**	**94**	**71**	**54**	**46**	**65**	**36**	**47**	**33**	**33**	**-54**

Trucks with a MAM exceeding 3500 kg

Trucks with a MAM exceeding 3500 kg were involved in 4,302 casualty accidents, occurring mainly on interurban roads (79%).

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 in accidents on interurban roads.

The figure for occupant deaths of trucks with MAM exceeding 3500 kg on interurban roads was the same in 2017 and 2018: 55 individuals. On these roads, the number of occupants of these trucks requiring hospitalization decreased (20% less) as compared with 2017. On urban roads, there was 1 more death and 1 fewer hospitalised injured casualty than in 2017.

Table 75. Casualty accidents involving trucks with a MAM exceeding 3500 kg on interurban and urban roads. Spain, 2018

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	3,382	79%	255	90%	55	200	89%	106	96%	1,110	92%
Urban roads	920	21%	28	10%	3	25	11%	4	4%	100	8%
Total	**4,302**	**100%**	**283**	**100%**	**58**	**225**	**100%**	**110**	**100%**	**1,210**	**100%**

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

Table 76. Evolution of the occupant deaths in trucks with a MAM exceeding 3500 kg on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017
Interurban roads	69	68	71	50	42	46	58	50	55	55	0
Urban roads	0	2	2	0	1	2	1	5	2	3	1
Total	**69**	**70**	**73**	**50**	**43**	**48**	**59**	**55**	**57**	**58**	**1**

Table 77. Evolution of the hospitalised injured casualties travelling in trucks with a MAM exceeding 3500 kg on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation(1) 2018/2017	Year-on-year variation 2009-2018
Interurban roads	229	189	198	158	143	169	175	146	132	106	-20%	-8%
Urban roads	6	10	6	2	6	13	10	12	5	4	-1	-2
Total	**235**	**199**	**204**	**160**	**149**	**182**	**185**	**158**	**137**	**110**	**-20%**	**-8%**

(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 2018, there were 2,269 casualty accidents in which a bus or coach was involved; 87% of them occurred on urban roads. On this type of road there were 1,969 accidents in which 21 individuals were killed (1 occupant), 36 bus or coach occupants were hospitalised injured casualties and 1,817 injured occupants did not require hospitalization.

On interurban roads, there were 300 casualty accidents in which a bus or coach was involved. 11 occupants were killed, 40 occupants required hospitalization and 410 occupants did not.

In 2018, on interurban roads, there were 9 more occupant fatalities and 32 more hospitalised injured casualties than in 2017; on urban roads there was 1 occupant fatality, as in 2017, and 3 fewer hospitalised injured occupant casualties than in 2017.

Table 78. Road traffic casualty accidents involving buses or coaches on urban and interurban roads. Spain, 2018

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	300	13%	35	11	24	40	410	18%
Urban roads	1,969	87%	21	1	20	36	1,817	82%
Total	**2,269**	**100%**	**56**	**12**	**44**	**76**	**2,227**	**100%**

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

Table 79. Evolution of bus or coach fatalities on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017
Interurban roads	20	2	3	1	10	23	2	18	2	11	9
Urban roads	1	2	0	2	1	3	0	3	1	1	0
Total	**21**	**4**	**3**	**3**	**11**	**26**	**2**	**21**	**3**	**12**	**9**

Table 80. Evolution of hospitalised injured bus or coach occupants on interurban and urban roads. Spain, 2009-2018

Type of road	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Variation 2018/2017
Interurban roads	75	25	23	12	28	91	3	53	8	40	32
Urban roads	48	52	42	31	46	33	46	30	39	36	-3
Total	**123**	**77**	**65**	**43**	**74**	**124**	**49**	**83**	**47**	**76**	**29**

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.

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 are analysed. As this table shows, distraction was reported as a contributory factor in 32% of fatal accidents; speeding in 22%; and alcohol in 21%.

Table 81. Distribution of contributory factors in casualty and fatal accidents occurring on interurban and urban roads. Year 2018. (Catalonia and Basque Country excluded).

Contributory factor	Casualty accidents		Fatal accidents	
	Cases	% Of total accidents	Cases	% Of total accidents
Inattentive or distracted driving	18,591	26%	423	32%
Inappropriate speed	6,604	9%	301	22%
Alcohol *	2,892 (out of 23,789)	12%	184 (out of 874)	21%

Note: The actual total number of casualty accidents is 70,640 and of fatal accidents is 1,338. Several factors may be present in a single accident.
**As regards alcohol, the sample considered is 23,789 casualty accidents and a sample of 874 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.*

Distraction[1]

In 2018 distraction was reported as a contributory factor in 26% of casualty accidents and in 32% of fatal accidents. On interurban roads, distraction was reported as a contributory factor in 35% of fatal accidents; on urban roads, the percentage was 23%.

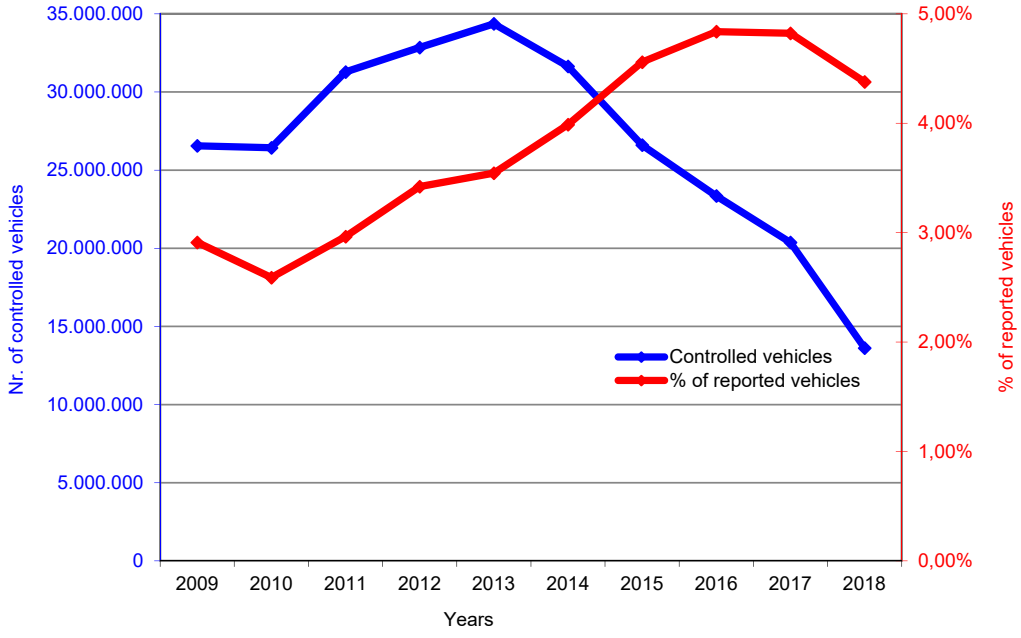
Inappropriate speed, according to the assessment by law enforcement officer at the time of the accident, was reported as a contributory factor in 9% of casualty accidents in 2018 and this percentage increases up to 19% when the casualty accident occurs on an interurban road, as analysed in the first section in this chapter. It was noted that speed was a contributory factor in 22% of fatal accidents.

In 2018 the total number of traffic offences reported by DGT was 4,179,689. Of which, 62% were speed-related. These traffic offences were detected by the Traffic Division of the Guardia Civil and by fixed safety and point-to-point speed cameras and helicopters.

Speed[2]

In 2018 the Traffic Division of the Guardia Civil[3] performed speed controls to 13.6 million vehicles, with an outcome of 596,030 vehicles being reported. As compared with 2017, around 6.7 million fewer vehicles have been controlled and the percentage of reported vehicles has been 4.4%. Taking 2014 as the reference year, the number of controlled vehicles has decreased by 18 millions, whereas the percentage of reported vehicles has increased by 0.4 percentage points. This shows that a more selective surveillance effort has been made.

Figure 8. Number of controls performed by the Traffic Division of the Guardia Civil. Years 2009-2018



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

[2] *In order to improve the comparability of data, accidents occurring in Catalonia and the Basque Country have excluded from the analysed 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.*

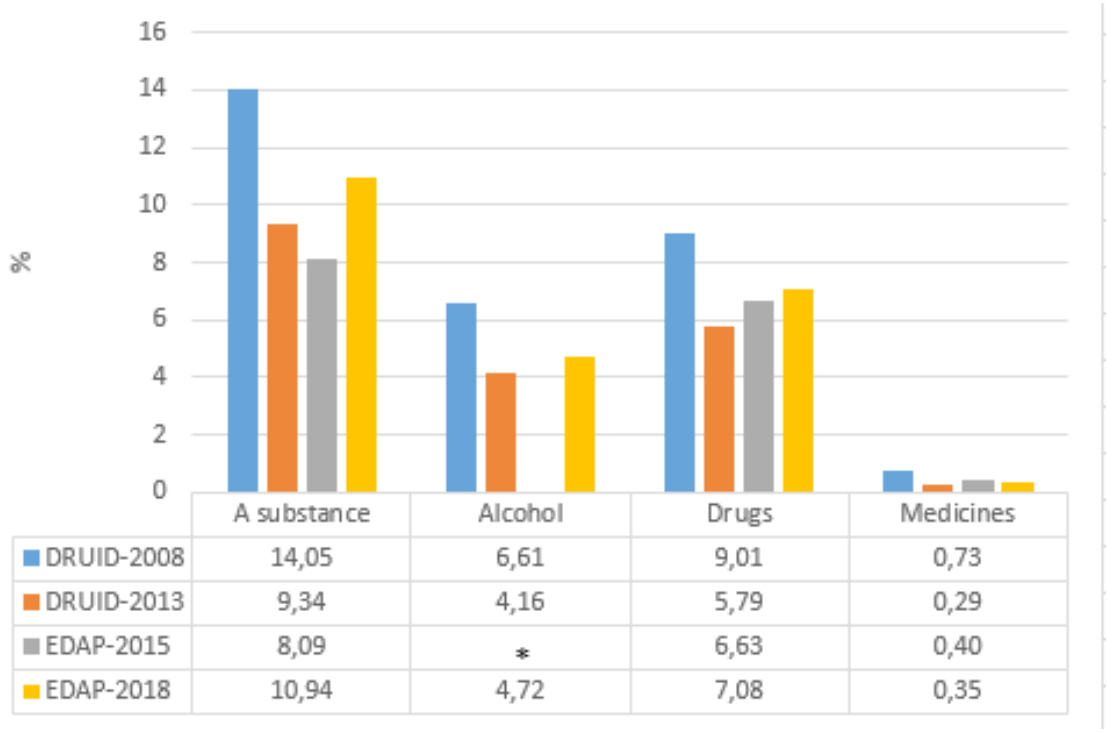
[3] *Whose activity excludes public roads on the Basque Country and Catalonia as well as Municipalities with their own local police forces.*

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, four editions of the study have been completed: DRUID project (2008-2009), Study on the EDAP prevalence for 2013, 2015 and 2018.

Figure 9. Evolution of the consumption of alcohol, drugs and medicines when driving (years 2008, 2013, 2015 and 2018)



	A substance	Alcohol	Drugs	Medicines
DRUID-2008	14,05	6,61	9,01	0,73
DRUID-2013	9,34	4,16	5,79	0,29
EDAP-2015	8,09	*	6,63	0,40
EDAP-2018	10,94	4,72	7,08	0,35

Note: Alcohol >0,05 mg/l exhaled air
(*) Figure is still being reviewed

Presence of psychoactive substances by 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 detailed

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

information on people, vehicles, infrastructures and environments, with the INTCF and the IML databases, which record 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 2018, there were 120,408 drivers involved in casualty accidents, of whom 911 were killed.

The Spanish National Toxicology Institute performed the analysis of samples from fatally injured drivers, of which 531 cases could be identified in the National Register for Road Traffic Accident Victims.

The Institute of Forensic Medicine and Science in Murcia performed analysis on samples from 45 drivers identified in the RNVAT.

The Institute of Forensic Medicine and Science in Galicia performed analysis on samples from 34 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 45,067 surviving drivers and drugs tests to 9,296 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[5]: 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[6].

In 2018, 120,408 drivers were involved in casualty accidents on interurban and urban roads; there is evidence of having tested 38% of them for alcohol. In the case of fatally injured drivers, the percentage of tested drivers was 68%, the percentage of hospitalised injured drivers was 25%, of non-hospitalised injured drivers was 36% and of non-injured drivers was 41%.

As regards the tests for alcohol with a positive result: 23% of killed drivers tested positive, 12% of the hospitalised injured drivers, 8% of the non-hospitalised injured drivers and 7% of the non-injured drivers.

As compared with 2017, the percentage of fatally injured drivers testing positive has fallen from 26% to 23%, although we should consider that testing coverage has decreased from 72% to 68%, in the case of fatally injured drivers.

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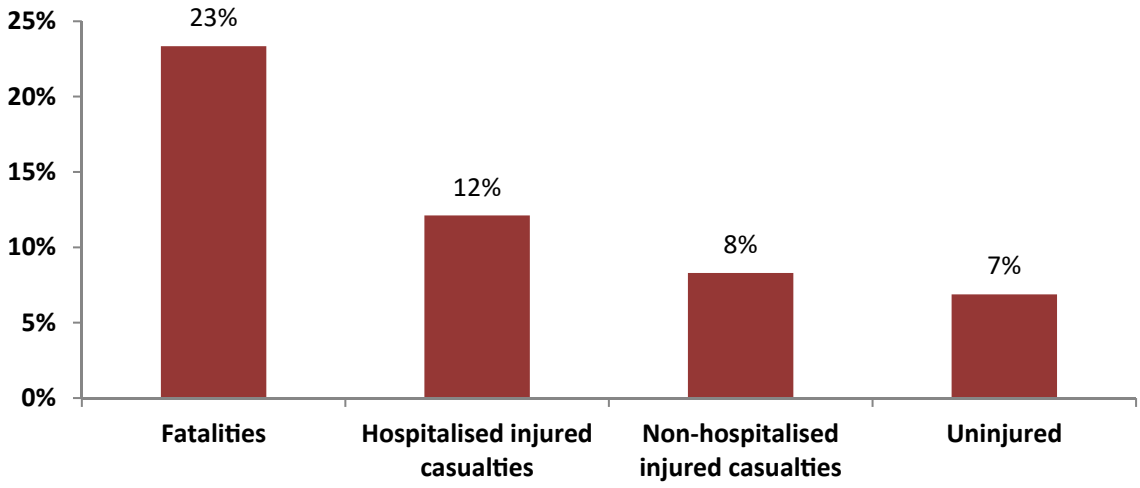
[5] *Royal Decree 1428/2003 of 21 November approving the General Regulations on Road Traffic for applying and implementing the articled text on the Law on Road Traffic, Motor Vehicles and Road Safety, approved by Royal Legislative Decree 339/1990 of 2 March 1990.*

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

Table 82. Results of alcohol testing in drivers involved in casualty accidents. Interurban and urban roads. Year 2018, 2017 values in red and in brackets. (Catalonia and Basque Country excluded).

Severity of casualty	Total drivers	Drivers with proof of testing	% of drivers with proof of testing	Drivers testing positive	Alcohol positive percentage
Fatalities	911	621	68% (72%)	145	23% (26%)
Hospitalised casualties	4,280	1,090	25% (21%)	132	12% (15%)
Non-hospitalised injured casualties	56,895	20,291	36% (33%)	1,684	8% (8%)
No healthcare required	56,449	23,342	41% (41%)	1,605	7% (7%)
Not classified	1,873	344	18% (17%)	28	8% (7%)
Total	**120,408**	**45,688**	**38% (36%)**	**3,594**	**8% (8%)**

Figure 10. Percentage of alcohol tests with a positive result, by severity degree. Drivers involved in casualty accidents. Interurban and urban roads. Year 2018. (Catalonia and Basque Country excluded).



On interurban roads, 46,390 drivers were involved in casualty accidents; there is evidence of having tested 70% of them for alcohol. The percentage of tests performed in the case of fatally injured drivers is 70%. As for surviving drivers, tests were performed to 38% of hospitalised injured casualties, to 71% of non-hospitalised injured casualties and to 89% 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 23% 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 83. Results of alcohol testing in drivers involved in casualty accidents. Interurban roads. Year 2018, 2017 values in red and in brackets. (Catalonia and Basque Country excluded).

Severity of casualty	Total drivers	Drivers with proof of testing	% of drivers with proof of testing	Drivers testing positive	Alcohol positive percentage
Fatalities	744	520	70% (73%)	117	23% (24%)
Hospitalised casualties	2,432	928	38% (32%)	87	9% (11%)
Non-hospitalised injured casualties	24,264	17,297	71% (65%)	1,075	6% (6%)
No healthcare required	18,394	16,388	89% (86%)	655	4% (4%)
Not classified	556	242	44% (41%)	4	2% (1%)
Total	**46,390**	**35,375**	**70% (71%)**	**1,938**	**5% (6%)**

On urban roads, 74,018 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 60%. As for surviving drivers, tests were performed to 9% of hospitalised injured casualties, to 9% of non-hospitalised injured casualties and to 18% 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 28% in fatally injured drivers. We can observe that, for all severity degrees, the percentages of positive alcohol tests on urban roads are higher than those for interurban roads.

Table 84. Results of alcohol testing in drivers involved in casualty accidents. Urban roads. Year 2018, 2017 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	167	101	60% (64%)	28	28% (32%)
Hospitalised casualties	1,848	162	9% (7%)	45	28% (36%)
Non-hospitalised injured casualties	32,631	2,994	9% (9%)	609	20% (18%)
No healthcare required	38,055	6,954	18% (19%)	950	14% (14%)
Not classified	1,317	102	8% (13%)	24	24% (20%)
Total	**74,018**	**10,313**	**14% (14%)**	**1,656**	**16% (16%)**

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 66% 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 66% for interurban roads and 64% for urban roads. Besides, the percentage 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 71% for urban roads.

Figure 11. Blood alcohol concentration in drivers killed in traffic accidents who tested positive. Interurban roads. Year 2018. (Catalonia and Basque Country excluded).

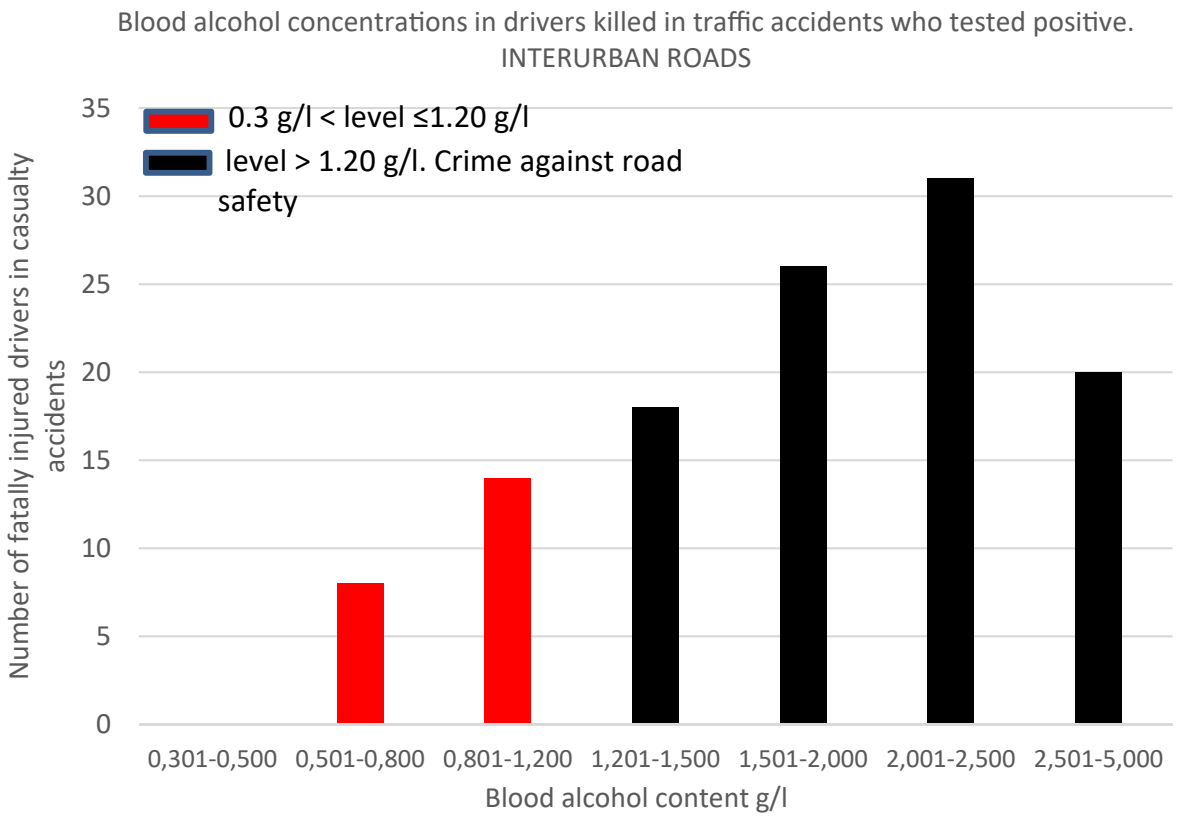
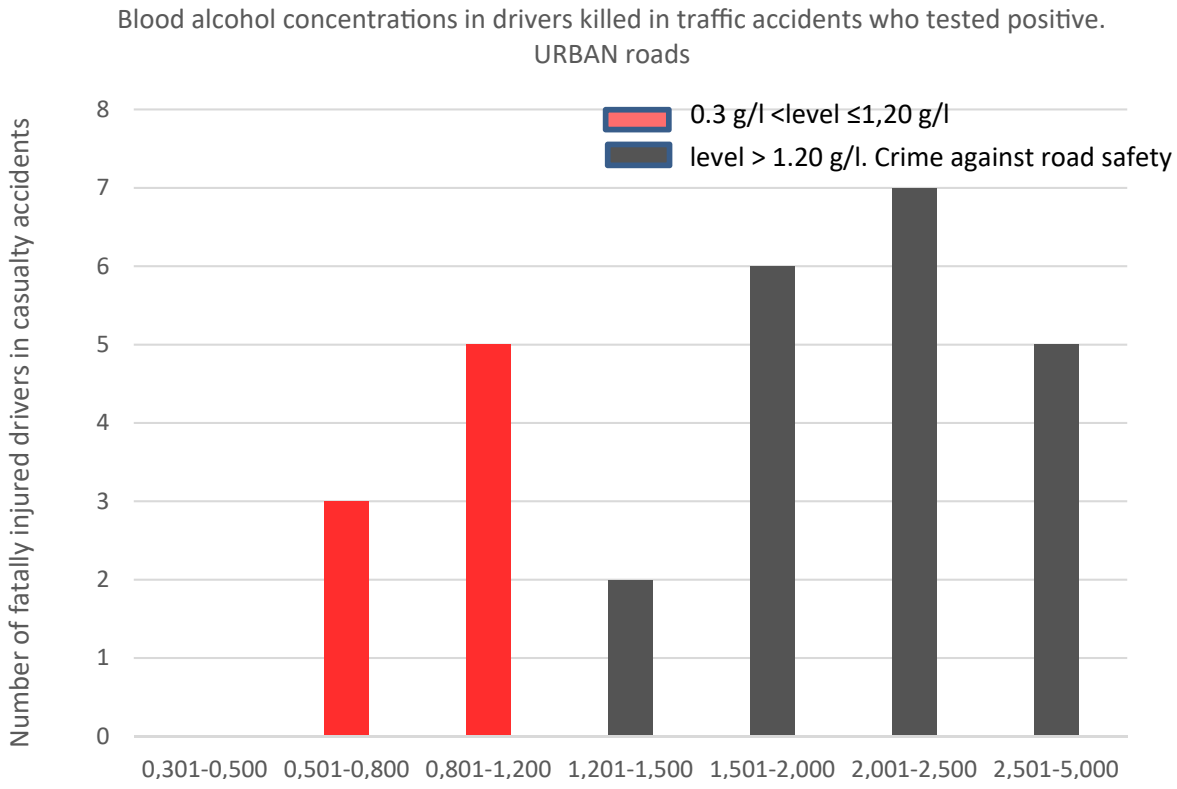


Figure 12. Blood alcohol concentration in drivers killed in traffic accidents who tested positive. Urban roads. Year 2018. (Catalonia and Basque Country excluded).



As regards the consumption of illegal drugs[7] there is evidence of having tested 68% of fatally injured drivers, of whom 19% tested positive.

The percentage of fatally injured drivers submitted to test was 69% on interurban roads and 60% on urban roads, of whom 17% tested positive on interurban roads and 27% on urban roads. The positive percentage on urban roads is significantly higher than in 2017 although this increase must be considered very carefully because the percentage of tested drivers has decreased by 6 points.

[7] *The following substances have been considered: amphetamines, cocaine, cannabis and opioids. 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.*

Table 85. Results of alcohol testing in drivers involved in casualty accidents. Interurban and urban roads. Year 2018, 2017 values in red and in brackets. (Catalonia and Basque Country excluded).

Severity of casualty	Total driver fatalities	Fatally injured drivers with proof of testing	% of fatally injured drivers with proof of testing	Fatally injured drivers testing positive	Drug positive percentage
Interurban roads	744	517	69% (73%)	90	17% (15%)
Urban roads	167	101	60% (66%)	27	27% (16%)
Total	**911**	**618**	**68% (72%)**	**117**	**19% (15%)**

The most common substances on fatally injured drivers testing positive for drugs are cocaine (50%) and cannabis (60%). Opioids and amphetamines are less common (6%).

Table 86. Substances tested for in drug testing performed on drivers with a positive result. Interurban and urban roads. Year 2018, 2017 values in red and in brackets. (Catalonia, Basque Country excluded).

SUBSTANCE	Fatally injured drivers	Percentage
Cocaine	58	50% (47%)
Opioids	7	6% (4%)
Amphetamine	7	6% (5%)
Cannabis	70	60% (61%)
Drivers testing positive for drugs	**117**	**100% (100%)**

The percentage of fatally injured drivers testing positive for alcohol and/or drugs was 35% in 2018.

Table 87. Fatally injured drivers submitted to alcohol and/or drug testing and results. Interurban and urban roads. Year 2018, 2017 values in red and in brackets. (Catalonia and Basque Country excluded).

	Evidence of tests performed for alcohol and/or drugs	Positive in alcohol and/or drug testing	Percentage of positive in alcohol and/or drug testing
Fatally injured drivers	623	221	35% (33%)

Controls performed by the Traffic Division of the Guardia Civil (ATGC)[8]:

Alcohol

In 2018 the Traffic Division of the Guardia Civil performed 5,509,022 breath alcohol tests within the framework of their competences, which means 6% more as compared to the tests conducted 2017. Of the 4,752,798 preventive control tests performed, 1.3% 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 139,703 drug tests in 2018, as against the 89. 812 performed in 2017, which means an increase by 56%. Of the 113,020 preventive control tests performed, 37% were positive.

Seat belt and helmet

Motorcycles

4% of fatally injured and 1% of hospitalised injured motorcycle users did not wear the safety helmet on interurban roads. On urban roads, 11% of fatally injured and 7% of hospitalised injured motorcyclists did not wear the safety helmet in 2018. Compared with 2017, the number of unhelmeted motorcyclists being killed on interurban roads has increased by 3 percentage points whereas the figures for unhelmeted hospitalised injured motorcyclists decreased by one percentage point. On urban roads, unhelmeted fatalities increased by 3 percentage points and unhelmeted hospitalised injured motorcyclists did so by 4 percentage points compared with the previous year.

Table 88. Fatally and hospitalised injured motorcyclists by helmet use. Spain, 2013-2018

Motorcycles. Interurban roads	2013	2014	2015	2016	2017	2018
Unhelmeted fatalities	8	5	12	5	2	10
Total motorcycle fatalities	203	188	247	234	251	241
% non-use of helmet	4%	3%	5%	2%	1%	4%
Unhelmeted hospitalised injured motorcyclists	16	11	10	12	19	17
Total hospitalised injured motorcyclists	1,152	1,125	1,180	1,214	1,250	1,229
% non-use of helmet	1%	1%	1%	1%	2%	1%
Motorcycles. Urban roads	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Unhelmeted fatalities	14	10	8	10	9	13
Total motorcycle fatalities	98	99	82	109	108	118
% non-use of helmet				9%	8%	11%
Unhelmeted hospitalised injured motorcyclists	120	44	39	41	51	98
Total hospitalised injured motorcyclists	1,358	1,458	1,419	1,467	1,534	1,453
% non-use of helmet	9%	3%	3%	3%	3%	7%

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

[8] *Their scope 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 2018, 9 out of 35 did not wear a helmet on interurban roads and nor did 4 out 27 on urban roads. Comparing 2018 with the previous year, on interurban roads, there has been an increase in unhelmeted moped fatalities and a decrease in unhelmeted hospitalised injured moped users. On urban roads the number of unhelmeted fatally and hospitalised injured moped users has increased.

Table 89. Fatally and hospitalised injured moped users by helmet use. Spain, 2013- 2018

Mopeds. Interurban roads	2013	2014	2015	2016	2017	2018
Unhelmeted fatalities	8	0	4	4	1	9
Total moped fatalities	34	21	28	26	26	35
% non-use of helmet	*	*	*	*	*	*
Unhelmeted hospitalised injured moped users	20	8	18	9	14	7
Total hospitalised injured moped users	267	156	198	167	166	137
% non-use of helmet	7%	5%	9%	5%	8%	5%
Mopeds. Urban roads	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Unhelmeted fatalities	0	1	3	2	1	4
Total moped fatalities	20	32	28	28	23	27
% non-use of helmet	*	*	*	*	*	*
Unhelmeted hospitalised injured moped users	34	28	28	27	17	18
Total hospitalised injured moped users	551	482	471	458	452	391
% non-use of helmet	6%	6%	6%	6%	4%	5%

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

Cars and vans

On interurban roads, in 2018, 23% of car and van fatalities aged 12 and over did not wear the seat belt and on urban roads neither did 20 out of the 76 fatalities. As for hospitalised injured casualties, 10% of them did not wear the seat belt on interurban roads and neither did 19% on urban roads.

Table 90. Fatally and hospitalised injured car and van occupants aged 12 and over by seat belt use. Spain, 2013-2018

Cars and vans. Occupants aged 12+ Interurban roads	2013	2014	2015	2016	2017	2018
Fatalities not wearing a seat belt	146	169	155	154	189	165
Total car and van fatalities	672	733	695	722	784	727
% non-use of seat belt	22%	23%	22%	21%	24%	23%
Hospitalised injured occupants not wearing a seat belt	259	230	242	267	230	229
Total hospitalised injured car and van occupants	2,766	2,533	2,450	2,626	2,457	2,268
% non-use of seat belt	9%	9%	10%	10%	9%	10%
Cars and vans. Occupants aged 12+ Urban roads	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Fatalities not wearing a seat belt	21	23	19	33	35	20
Total car and van fatalities	75	75	70	83	87	76
% non-use of seat belt	*	*	*	*	*	*
Hospitalised injured occupants not wearing a seat belt	151	120	87	102	109	106
Total hospitalised injured car and van occupants	754	680	637	555	608	562
% non-use of seat belt	20%	18%	14%	18%	18%	19%

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

On interurban roads, in 2018, the 10 child fatalities under 12 years of age were using a safety system, a CRS or a seat belt. As for hospitalised injured casualties on interurban roads, 6 out of the 73 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 2 out of the 12 hospitalised injured children under 12 years of age did not use either a CRS or a seat belt.

Table 91. Fatally and hospitalised injured car and van occupants aged up to 12 years by child restraint system and seat belt use. Spain, 2013-2018

Cars and vans. Occupants up to 12 years. Interurban roads	2013	2014	2015	2016	2017	2018
Fatalities not wearing a seat belt or CRS	4	2	4	3	5	0
Total car and van fatalities	20	13	13	18	17	10
% non-use of seat belt or CRS						*
Hospitalised injured occupants not wearing a seat belt or CRS	11	9	7	6	4	6
Total hospitalised injured car and van occupants	76	71	66	72	76	73
% non-use of seat belt or CRS	*	*	*	*	*	*
Cars and vans. Occupants up to 12 years. Urban roads	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Fatalities not wearing a seat belt or CRS	0	0	0	0	0	0
Total car and van fatalities	0	1	0	0	0	0
% non-use of seat belt or CRS	*	*	*	*	*	*
Hospitalised injured occupants not wearing a seat belt or CRS	3	0	1	0	1	2
Total hospitalised injured car and van occupants	12	11	8	9	11	12
% non-use of seat belt or CRS	*	*	*	*	*	*

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

9 The european context

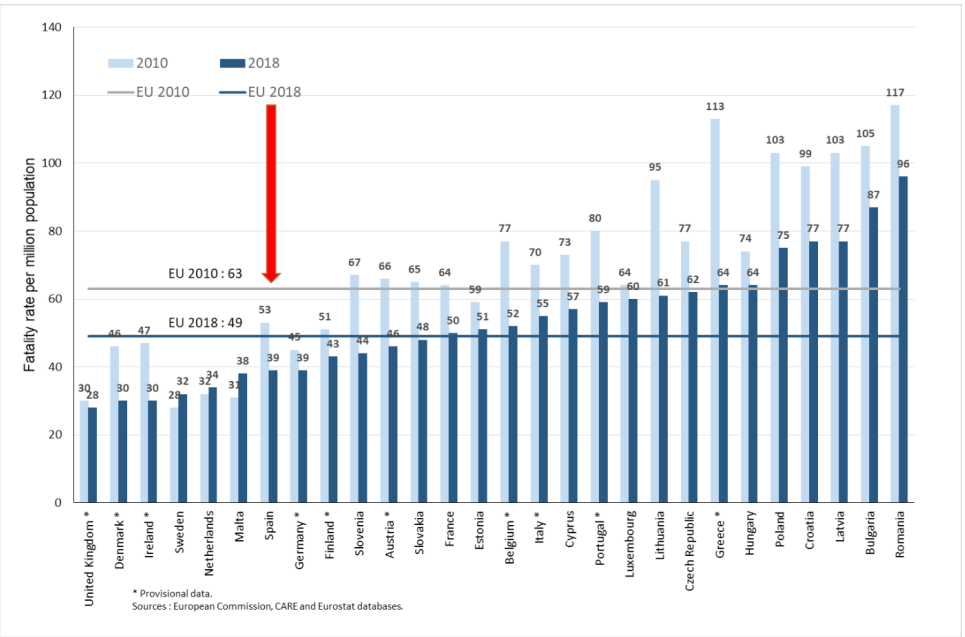
Situation in Spain

In 2018 there were more than 25,000 road traffic fatalities in the 28-European Union, 7% of these fatalities occurred in Spain. In that same 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.

On the date of issue of this publication, definitive figures on accident rate for all countries for the year 2018 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.

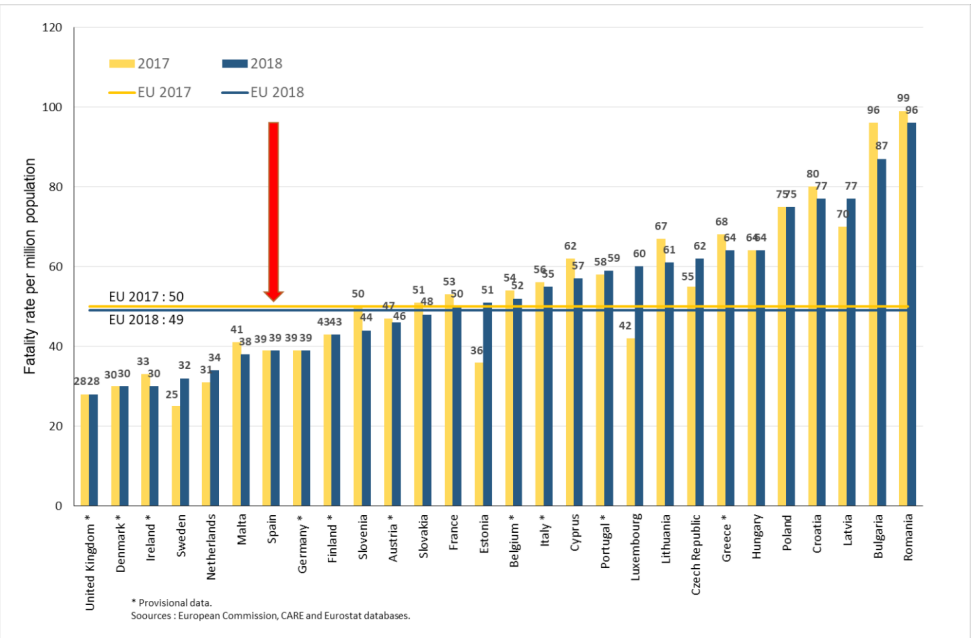
The following graph shows the evolution of fatality rates per million population between 2010 - the year used as reference for halving the number of fatalities by 2020 - and 2018. In 23 out of the 28 Member States of the EU the rate has decreased compared with 2010 and in 3 Member States this rate has increased: Sweden —from 28 to 32—, the Netherlands —from 32 to 34 and Malta —from 31 to 38. In the case of Spain, the rate was at 53 fatalities per million population (2,478 deaths) in 2010, below the European average rate that was at 63. In 2018 the rate was at 39 fatalities per million population, below the European average rate for that same year (49 deaths per million population). Spain ranks seventh among countries with the lowest figures on accident rate.

Figure 13. Fatality rate per million population in the European Union. 2010, 2018



Compared to 2017, fatality rates per million population for 2018 have increased in seven countries: Sweden —from 25 to 32—, the Netherlands —from 31 to 34—, Estonia —from 36 to 51—, Portugal —from 58 to 59—, Luxembourg —from 42 to 60—, Czech Republic —from 55 to 62—, and Latvia —from 70 to 77. In seven countries the rate remains unchanged in 2018 and 2017, among them Spain; in fourteen countries the rate has decreased.

Figure 14. Fatality rate per million population in the European Union. 2017, 2018



ANNEXES

ANNEX I. Methodological notes

Databases used to prepare 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 National Register for Road Traffic Accident Victims 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.

e) 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 http://www.msssi.gob.es/estadEstudios/estadisticas/EncuestaEuropea/Enc_Eur_Salud_en_Esp_2014.htm

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

Every year, the Ministry of Development publishes in its Statistical Yearbook (http://www.fomento.es/MFOM/LANG_CASTELLANO/ATENCION_CIUDADANO/INFORMACION_ESTADISTICA/EstadisticaSintesis/Anuario/default.htm) 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.

From 2011 to 2015 the method of calculation was a two-phased process:

During the first phase, the DGT's road traffic accident register is combined 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:

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

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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