





# SPAIN



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Spain recorded 1 370 road fatalities in 2020, a 21.9% decrease on 2019 figures. This marks the third decrease since 2013, breaking a run of four consecutive years of increasing annual road fatalities. In 2020, the traffic volume on interurban roads decreased by 22% compared to 2019. Between 14 March 2020 and 3 May 2020, road fatalities decreased by 72% compared to the same period in 2019. The Spanish Road Safety Strategy reached its objective of reducing the rate of road fatalities to under 3.7 per 100 000 inhabitants by 2020. In 2020, the Council of Ministers approved a package of legal reforms that substantially amended the legislation on traffic and circulation. These legislative changes aimed to create a new road safety model in line with EU policy and the WHO recommendations to reduce the number of deaths and serious injuries from road accidents by 50% over the next decade. The Spanish Road Safety Strategy 2030 was presented at the National Road Safety Council and is pending the approval of the Spanish Government.

### Road safety management and strategy

Road fatalities in Spain peaked in 1989 with 9 344 deaths. They reached their lowest level in 2020, with 1 370 deaths. Since 2013, the number of fatalities increased each year until 2017, with an overall increase of 9%, most likely explained by the increase in traffic volume (measured in millions of vehicle-kilometres travelled) over that period, among other factors. In 2018, the number of fatalities started to fall again by a modest 1.3% and it decreased again in 2019 and 2020 by 2.8% and 21.9%, respectively.

In the past 15 years, improvements have been introduced in all elements of the road traffic system. Indicators related to drivers' behaviour show that speeding, drink driving, and the nonwearing of seat belts have significantly reduced. This is likely related to improvements in education and training, increased enforcement, the penalty point system and the Crime Code reform.

The length of motorways and dual carriageways increased from 4 693 kilometres in 1990 to 15 583

#### Spain: Quick facts

Population: 47.3 million GDP per capita: USD 27 068 Registered motor vehicles: 36.7 million • cars: 67%

- goods vehicles: 14%
- motorcycles: 10%
- motorcycles. 1

#### Speed limits:

- urban roads: 10-50 km/h
- rural roads: 90 km/h
- motorways: 120 km/h

#### Limits on Blood Alcohol Content:

- general drivers: 0.5 g/l
- professional drivers: 0.3 g/l
- novice drivers: 0.3 g/l

#### Road fatalities: 1 370

- pedestrians: 19%
- cyclists: 5%
- car occupants: 40%
- motorcyclists: 25%
- other: 11%

Road fatalities per 100 000 population: 2.9 Road fatalities per 10 000 vehicles: 0.4 Cost of road crashes: 0.9% of GDP

All data 2020 unless otherwise stated.

kilometres in 2018. It is estimated that the fatality risk per unit of exposure on these types

of roads is about 28% of the corresponding value for rural roads. There have also been improvements in the traffic management system, with the mass rollout of traffic cameras, vehicle detectors, and variable message signs. This has contributed not only to improvements in safety but also to reductions in congestion and travel times.

As for the vehicle fleet, necessary actions in roadworthiness inspections and renewal schemes have been implemented.

Responsibility for the organisation of road safety in Spain lies with the Directorate General for Traffic (DGT), which falls under the Ministry of the Interior. The core responsibilities of the DGT are at a national level on all interurban roads, except for the Basque Country and Catalonia.

The DGT has many key roles, including issuing and renewing driving licences and vehicle authorisations, and regulating and licensing private driving schools. The DGT is also responsible for controlling traffic and enforcing traffic law on all interurban roads (except in the Basque Country and Catalonia, and it is a shared competence with the traffic police in Navarra), including managing the Traffic Division of the Civil Guard (the police body in charge of traffic control and traffic law enforcement), with around 10 000 officers. Vehicles, drivers and traffic offences are registered through the DGT.

In addition to the above, the DGT centralises road traffic statistics and coordinates crash investigations. It is also responsible for developing road safety strategies, plans and policies, co-ordinating with other relevant ministries or public bodies and supervising driving information and road safety education campaigns.

The Spanish Road Safety Plan 2011-2020 was adopted by the Council of Ministers on 25 February 2011. Its primary objective was to reduce the rate of road fatalities to under 3.7 per 100 000 inhabitants by 2020. This objective was reached.

A draft of the Spanish Road Safety Strategy 2030 has been developed by the DGT and presented at the National Road Safety Council, the highest consultation body in Spain, with representatives from other ministries and civil society. The Strategy is pending approval and official presentation by the Spanish Government (Ministry of Interior). The Strategy was developed under the Safe System approach and with the long-term target of Vision Zero in 2050. Its main targets are aligned with those set by the European Commission: to halve deaths and serious injuries until 2030 compared to 2019. The Strategy will also set specific targets for the different road users, types of roads and age groups. The National Road Safety Observatory will monitor progress towards the targets and publish a yearly report.

# Latest road safety measures

In November 2020, the General Traffic Regulations were modified to change speed limits in cities, reducing general speed limits on urban roads from 50 km/h to 30 km/h on single-carriageway roads with one lane in each direction and to 20 km/h on single carriageway

roads with pavements at the same level as the carriageway. Roads with two or more lanes in each direction are limited to 50 km/h. It entered into effect on May 2021.

In December 2018, the General Regulations on Traffic were modified to reduce the general speed limit on all rural roads from 100 km/h to 90 km/h, in effect from January 2019.

In November 2020, the General Vehicle Regulations defined personal mobility vehicles and prohibited their use on interurban roads, through roads, pavements, urban tunnels, dual carriageways and motorways that run through towns. They must have a traffic certificate.

In November 2020, the reform of the General Regulations for Drivers reduced the age required to drive lorries and buses. It also allowed people with specific disabilities to access these driving licences.

In October 2019, the 2019-2020 Plan of Special Measures for the Road Safety of Motorcycles and Mopeds was launched. The plan includes regulatory modifications to increase the penalty points for not wearing a helmet and the mandatory use of gloves for motorcycle riders.

Since early 2019, the DGT has been working on a new set of measures linked to driver training regulation, including introducing eight hours of mandatory theory training to obtain a driving licence, in line with other European countries.

In 2020, more than 3.1 million alcohol tests and 48 000 drug tests were carried out by the Traffic Division of the Civil Guard.

In collaboration with the Traffic Division of the Civil Guard on interurban roads and local police forces, week-long targeted campaigns are implemented to address pressing road safety issues in urban areas. In 2020, campaigns included: school transport; trucks and vans; use of seat belts, child restraint systems and helmets; motorcycles; speed control; rural roads; consumption of alcohol and other drugs; vehicle condition and distractions.

In 2020, as expected, due to mobility restrictions, the number of controls carried out was lower than in 2019.

The DGT is co-operating with road authorities to implement low-cost road safety countermeasures on rural single-carriageway roads with one lane in each direction (1+1 roads), such as reinforcing safe overtaking in areas with high crash rates. The installation of smart junctions will also improve safety at the most dangerous intersections on rural roads with dynamic signalling systems warning of the presence of vehicles.

A new methodology will strengthen such steps for determining black spots, improve the identification and analysis of dangerous areas, and reduce serious crashes in identified sections. New criteria have been established for the location and management of speed cameras. Focusing on the use of speed cameras in those sections with high crash rates or

other dangerous conditions will further reduce the crash in these high-risk areas. The use of longitudinal rumble stripes will help avoid runoff and head-on crashes.

## **Costs of road crashes**

According to police-reported data, traffic crashes represent a high cost for society, estimated at around EUR 4.1 billion (around 0.4% of GDP). However, when health data are included, economic costs rise to EUR 9.6 billion (about 0.9% of GDP). These estimates do not include property damage and administrative expenses.

Costs are based on calculating a monetary value of statistical life based on a willingnessto-pay approach. A value of a statistical life of EUR 1.4 million (2020 prices) is used to compute the social costs of fatal road crashes in Spain. The same value is used to assess the benefits of road safety measures and economic evaluation of Spanish transport policies.

# Safety performance indicators

#### Speed

Inappropriate speed is one of the leading causes of road crashes. In 2020, inappropriate speed contributed to 9% of injury crashes and 25% of fatal crashes. On non-urban roads, inappropriate speed contributed to 19% of injury crashes and 27% of fatal crashes.

#### Drink-driving

The BAC limit is 0.5 g/l for general drivers and 0.3 g/l for novice and professional drivers in Spain.

In 2020, on interurban roads, 77% of drivers involved in injury crashes and 64% of fatally injured drivers were tested for alcohol, with 29% of fatally injured drivers testing positive. On urban roads, 15% of drivers involved in injury crashes and 62% of fatally injured drivers were tested for alcohol, with 43% of fatally injured drivers testing positive.

#### Drugs and driving

Regarding illegal drug consumption, in 2020, 61% of fatally injured drivers on interurban roads were administered drug tests, with 19% testing positive. On urban roads, 62% of fatally injured drivers were tested, with 31% testing positive.

#### Use of mobile phones while driving

Distraction, including the use of mobile phones, radios, DVDs, witnessing a previous crash, looking at the environment, absent-mindedness and sudden illness or

indisposition, was a factor in 17% of injury crashes and 31% of fatal crashes in 2020. It is a more prevalent issue outside urban areas (37% of fatal crashes).

Since 2002, the use of handheld mobile phones while driving has been forbidden. Only hands-free phones are permitted. As of 1 July 2006, driving while using handheld mobile phones, GPS, or other communication devices results in the loss of three points from the driving licence.

#### Seat belt and helmet use

Seat belt use has been compulsory in front seats outside urban areas since 1974 and front seats inside urban areas, and rear seats since 1992. In 2020, 27% of car and van fatalities aged 12 and over were not wearing seat belts on interurban roads. This figure jumps to 19 out of the 52 deaths on urban roads. As for people hospitalised following a crash, 14% of them were not wearing their seat belts on interurban roads and 29% on urban roads.

Children with a height of less than 135 cm must be seated on rear seats and use a dedicated child restraint system (CRS). In 2020, the three children (under 12) killed in road traffic as car occupants were not using CRSs or seat belts.

Helmet use is compulsory for riders of all motorised two-wheelers. The helmet-wearing rate is nearly 100%. Nevertheless, in 2020, 2% of those killed and 1% of hospitalised motorcyclists on interurban roads were not wearing a helmet. On urban roads, 16% of those killed and 4% of hospitalised motorcyclists were not wearing a helmet.

# Road safety data for Spain at a glance

							2020 % change over			
	1990	2000	2010	2018	2019	2020	2019	2010	2000	1990
eported safety data										
Fatalities	9 032	5 776	2 478	1 806	1 755	1 370	-21.9	-44.7	-76.3	-84.8
Injury crashes	101 507	101 729	85 503	102 299	104 080	72 959	-29.9	-14.7	-28.3	-28.
Injured persons hospitalised		27 764	11 995	8 935	8 613	6 681	-22.4	-44.3	-75.9	-
Deaths per 100 000 population	23.3	14.4	5.3	3.9	3.7	2.9	-22.6	-45.7	-79.9	-87.6
Deaths per 10 000 registered vehicles	5.1	2.2	0.7	0.5	0.5	0.4	-22.6	-49.7	-83.4	-92.7
atalities by road user										
Pedestrians	1 542	898	471	386	381	260	-31.8	-44.8	-71.0	-83.
Cyclists	160	84	67	58	80	71	-11.3	6.0	-15.5	-55.
Moped riders	683	474	100	62	49	32	-34.7	-68.0	-93.2	-95.3
Motorcyclists	792	392	386	359	417	313	-24.9	-18.9	-20.2	-60.
Passenger car occupants	5 034	3 289	1 197	732	641	544	-15.1	-54.6	-83.5	-89.3
Other road users	823	639	257	209	187	150	-19.8	-41.6	-76.5	-81.8
atalities by age group										
0-14 years	399	181	79	25	32	17	-46.9	-78.5	-90.6	-95.
15-17 years	417	223	50	24	34	21	-38.2	-58.0	-90.6	-95.
18-20 years	902	422	139	68	60	44	-26.7	-68.3	-89.6	-95.
21-24 years	1 266	661	174	115	78	70	-10.3	-59.8	-89.4	-94.
25-64 years	4 759	3 267	1 489	1 070	1 049	844	-19.5	-43.3	-74.2	-82.3
65-74 years		488	240	217	183	144	-21.3	-40.0	-70.5	
≥ 75 years		355	289	279	309	218	-29.4	-24.6	-38.6	
atalities by road type										
Urban roads	1 576	1 070	550	489	519	395	-23.9	-28.2	-63.1	-74.
Rural roads	6 916	4 349	1 839	1 235	1 145	910	-20.5	-50.5	-79.1	-86.
Motorw ays	541	357	89	82	91	65	-28.6	-27.0	-81.8	-88.
raffic data										
Registered vehicles (thousands)	17 615	25 715	33 375	35 663	36 343	36 657	0.9	9.8	42.6	108.
Registered vehicles per 1 000 population	453.7	642.1	717.9	764.4	774.3	774.5	0.0	7.9	20.6	70.

#### Long-term road safety trends for Spain



Evolution of road fatalities, injury crashes, motorisation, traffic and GDP in Spain, 2000-20

Road fatalities per 100 000 inhabitants in Spain in comparison with IRTAD countries, 2020





Road fatalities per 10 000 vehicles in Spain in comparison with IRTAD countries, 2020

Evolution of road fatalities in Spain by user category, age group and road type, 2010-20





# Road fatalities in Spain by user category, 2020



Road fatalities in Spain by road type, 2020



Road fatality rate in Spain by user category and age group, 2020 Rate per 100 000 population in the same age group

#### Cost of road crashes in Spain, 2020

	Unit Cost (EUR)	Total based on police reported data (EUR)	Total when health data is included (EUR)
Fatalities	1.4 million	1.98 billion	1.98 billion
Hospitalised persons	226 544	1.51 billion	4.65 billion
Slight injuries	6 310	0.55 billion	3.01 billion
Total		4.04 billion	9.64 billion
Total as % of GDP		0.4	0.9

## Seat belt and helmet wearing rates

Percentages

	2010	2012
Front seats		
Driver	89	90
Passenger	88	91
Urban roads (driver)	83	86
Rural roads (driver)	93	93
Motorways (driver)	96	96
Rear seats		
General	76	81
Helmet		
Riders of motorised two-wheelers	98	99
Passengers of motorised two-wheelers	91	93

# **Research and resources**

#### Publications

Main number of road safety, Spain 2020 (*Las principales cifras de la siniestralidad vial, España 2020*), <u>https://www.dgt.es/menusecundario/dgt-en-cifras/dgt-en-cifras-resultados/dgt-en-cifras-detalle/?id=00810</u>.

Statistical Report of Road Crashes 2020 (*Anuario Estadístico de Accidentes 2020*), <u>https://www.dgt.es/menusecundario/dgt-en-cifras/dgt-en-cifras-resultados/dgt-en-cifras-detalle/?id=00819</u>.

Trends in mobility and road safety in urban roads (*Tendencias de la movilidad y la siniestralidad en vías urbanas*), <u>https://www.dgt.es/menusecundario/dgt-en-cifras/dgt-en-cifras-detalle/?id=00161</u>.

#### Websites

General Traffic Directorate: <u>www.dgt.es/es/</u>.

# Definition, methodology, data collection

A road fatality is defined as any person who dies immediately or within 30 days of a crash due to injuries sustained in that crash.

A seriously injured person is any injured person hospitalised for more than 24 hours due to a road crash. By contrast, a slightly injured person is defined as any injured person who was not hospitalised for more than 24 hours due to a road crash.

Finally, a MAIS3+ injured person is defined as any person with road crash injuries for which the score on the Maximum Abbreviated Injury Scale is 3 or more.

In Spain, there are several sources of information for traffic injury data. The police collect detailed information and data on the circumstances of crashes using a dedicated form. Traffic police monitor the condition of those injured for 24 hours after the crash to classify the person as killed, seriously injured or slightly injured.

From 1993 to 2010, estimating the number of people killed within 30 days among those initially recorded as seriously injured was based on adjusting the number statistically after monitoring a representative sample of seriously injured people for 30 days. From 2011 onward, the number of fatalities has been determined by linking the register of crashes reported by the police and the national death register, which includes the total number of deaths registered throughout the national territory.

Since 2011, Spain has reported the number of MAIS injured persons based on hospital data. The methodology has recently been revised in the European Member States' work framework to harmonise data in the CARE database. The search for specific traumatic injury codes is now performed among primary diagnoses and the 14 diagnoses that may be recorded for each patient.