



ROAD SAFETY ANNUAL REPORT 2019

FRANCE

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France recorded 3 248 road fatalities in 2018, its lowest fatalities total on record and a decrease of 5.8% compared to 2017. The mortality rate is 5.0 deaths per 100 000 population. Cyclists are the only category whose mortality has increased for the third consecutive year. In 2018 the speed limit on rural bi-directional roads without a median barrier was reduced from 90 to 80 km/h. A preliminary evaluation showed that this measure saved 200 lives in one year. It is unlikely that the current target of reducing the number of road fatalities to below 2 000 by 2020 will be achieved.

Note: Data presented in this report concern the French metropolitan area only.

Trends

France recorded an **overall decrease in the number of road deaths in 2018** and reached its lowest level to date. According to the latest available data, 3 248 people died in road crashes in 2018. This is 200 fewer than in 2017, a decrease of 5.8%, and 20 fewer than in 2013 when the number of road deaths had been the lowest recorded. From 2014 to 2017, the number of road deaths increased every year.

The **longer-term trend for road deaths** in France has shown significant progress. Between 2000 and 2018, the number of annual road fatalities fell by 60%. However, most of the reduction occurred in the 2000-13 period.

The number of **traffic deaths per 100 000 inhabitants** in France has fallen by 63% between 2000 and 2018. In 2018, 5.0 traffic deaths per 100 000 inhabitants were recorded, compared to 13.7 in 2000. By way of comparison, the average in the European Union is 4.9 deaths per 100 000 inhabitants in 2018.

Measured as **traffic deaths per billion vehicle-kilometres** (vkm) driven, the fatality risk of France showed similar progress in the long term. In 2018, this metric stood at 5.4, its lowest level and 66% lower than in 2000. The fatality risk has declined faster than the number of deaths, due to growth in traffic volume, which has increased by 17% since 2000.

Country Profile

Population in 2018: 64.7 million

GDP per capita in 2018: USD 42 913

Cost of road crashes: 1.9% of GDP

Road network: 1.1 million kilometres (urban roads 15%; rural roads 84%; motorways 1%)

Registered motor vehicles in 2017: 43.7 million (cars 75%; goods vehicles 15%; motorised two-wheelers 10%)

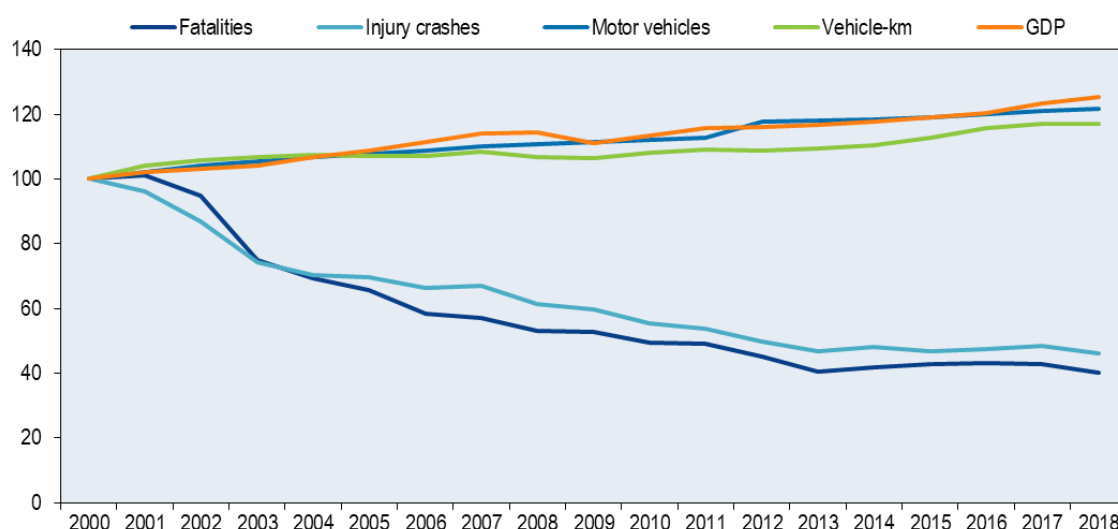
Volume of traffic : +17% between 2000 and 2018

Speed limits: 50 km/h on urban roads; 80 km/h on rural single carriageways (90 km/h when two lanes dedicated to the same direction); 110 km/h on dual carriageways; 130 km/h on motorways

Limits on Blood Alcohol Content: 0.5 g/l for general drivers; 0.2 g/l for professional drivers and novice drivers

France recorded 0.7 **road fatalities per 10 000 registered vehicles** in 2018. This represents a decrease of 80% compared to the year 1990 when the rate of deaths to registered vehicles stood at 3.6.

Figure 1. Road safety, vehicle stock, traffic and GDP trends
Index 1990 = 100



The picture for **fatalities by road user groups** shows that passenger car occupants continue to be the group the most affected by road crashes. In 2018, passenger car occupants accounted for 50% of all road fatalities. They were followed by motorcyclists (19%), pedestrians (15%), cyclists (5%) and moped riders (4%). This breakdown has remained relatively stable in the past years.

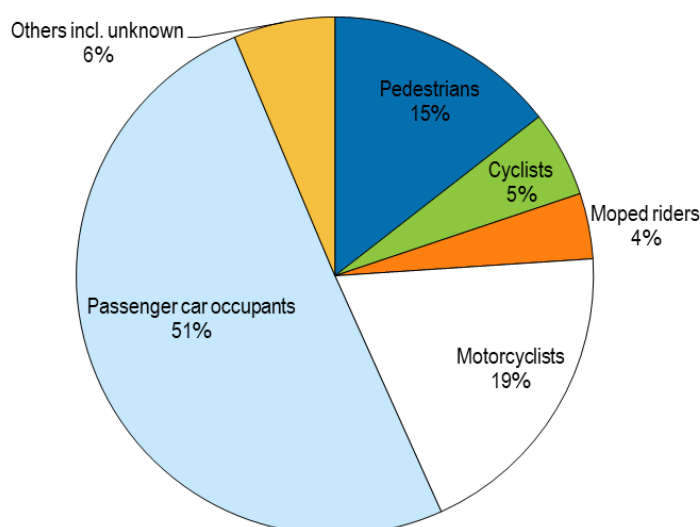
Motorised two-wheelers (motorcyclists and moped riders) are still overrepresented in road fatalities. While motorised two-wheelers account for less than 2% of the distance travelled, they represent 23% of the total fatalities and 38% of those seriously injured (with a maximum abbreviated injury score of 3 and more) according to estimations by IFSTTAR. The fatality risk per kilometre driven is 22 times higher for a motorcyclist than for a car occupant.

Following a significant decrease between 2010 and 2017 (-53%), in 2018 the number of road deaths increased among moped riders (+14%). The number of cyclists killed also increased slightly (from 173 cyclists killed in 2017 to 175 in 2018). For all other user categories, the number of road deaths decreased with the strongest decline among car occupants (-7.4%). Cyclists are the only category whose mortality has increased for the third consecutive year (from 149 in 2015).

The long-term trend shows that traffic in France has become safer for all road user groups but not to the same extent. The strongest decline was registered among moped riders, despite the relatively strong increase in 2018. Between 2000 and 2018, the number of moped riders killed fell by 70%. Car occupants saw road fatalities decrease by 69%. The decrease was less pronounced for pedestrians (-44%), cyclists (-35%) and

motorcyclists (-33%). For pedestrians and cyclists, the reduction mainly occurred before 2010. Since 2010, the number of pedestrians killed has stagnated at around 480 per year and the number of cyclists killed increased by 19.

Figure 2. Road fatalities by road user group in percentage of total, 2018



Road deaths by age group in 2018 showed a decrease for all age groups with the exception of the 15-17 age group. The number of road deaths for young people aged 15 to 17 increased from 101 to 106, which is still much below the 125 killed in 2015. It decreased for all other age categories, with the strongest decrease recorded for children aged 0 to 14 for whom the mortality rate decreased by 17%.

Looking at the longer-term trend, since 2000, the number of road deaths decreased for all groups but to a lesser extent for elderly people. The number of road deaths decreased by 70% or more for the 0-14, 15-17 and 18-20 age groups. It decreased by 69% for the 21-24 age group and by 59% for the 25-64 age group. But it only decreased by 37% for the people aged 65 and above, as their population increased by 40%.

Since 2010, the number of road deaths decreased for all age groups, except for the 65 and over-group. While on average the number of fatalities dropped by 19% during the 2010-18 period, the number of people killed among the 65-74 year-old age group increased by 26% and by 2% among the people aged 75 and above. This trend is associated with the demographic evolution in France, even though the risk tends to increase for people aged 75 and above.

The share of road fatalities by travel mode is largely influenced by age, given the minimum age required to drive certain vehicles. Thus, the 15-17 age group still represents the largest share of fatalities among moped riders. Children under 14 and persons 65 and over are particularly vulnerable as pedestrians and cyclists.

Despite recent improvements, young people continue to be most at risk of in road traffic. Those aged 18-20 and 21-24 suffer road fatalities at rates of 10.1 and 9.5 per 100 000, i.e. twice the mortality rate of the average population.

Elderly people above 75 are the third age group the most at risk in traffic with a mortality rate of 8.4 per 100 000 population.

Figure 3. Road fatality rates by age group
Deaths per 100 000 population in a given age group, 2000-2018

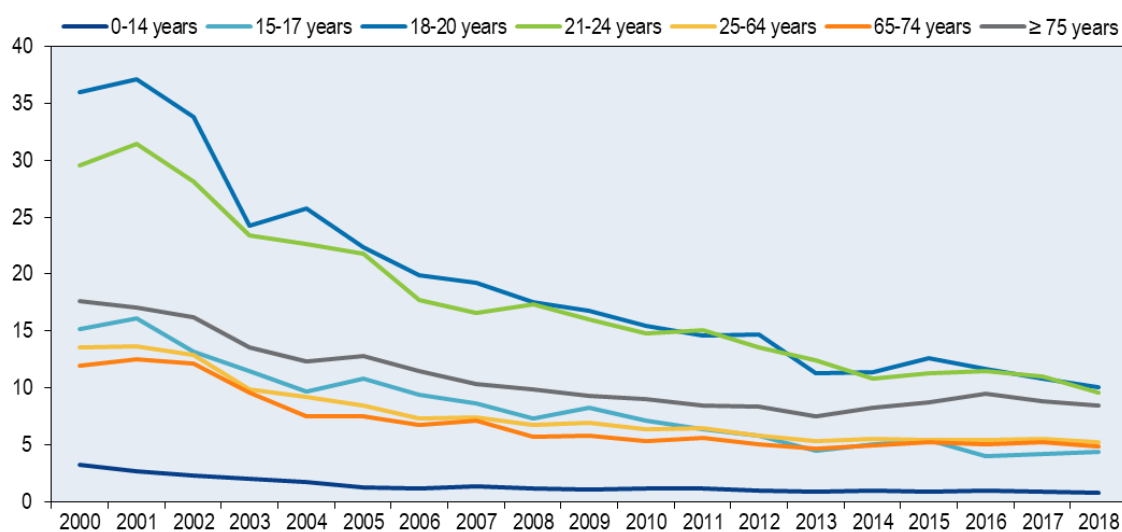
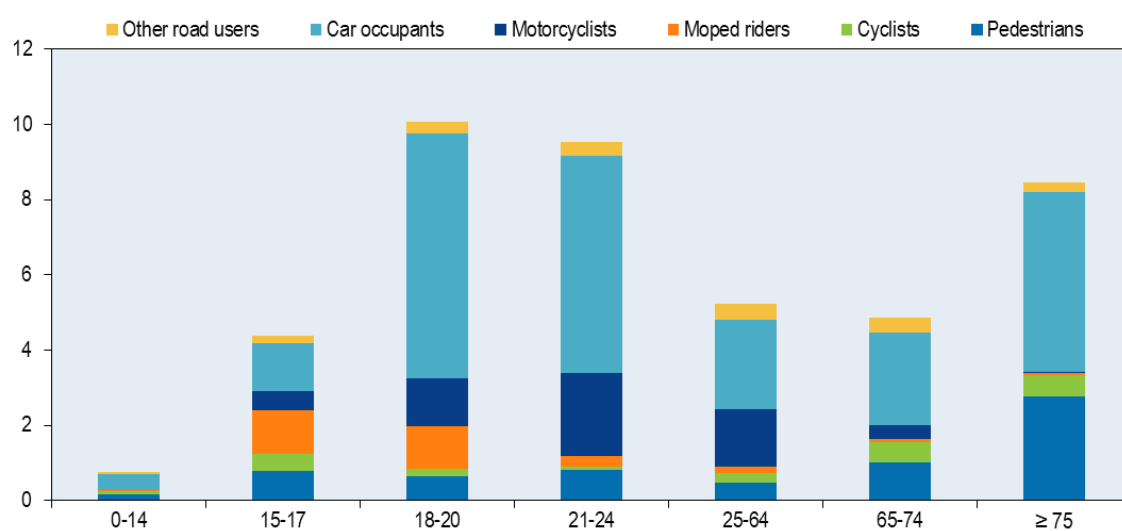


Figure 4. Road fatality rate by age and road user group
Fatalities per 100 000 population, 2018



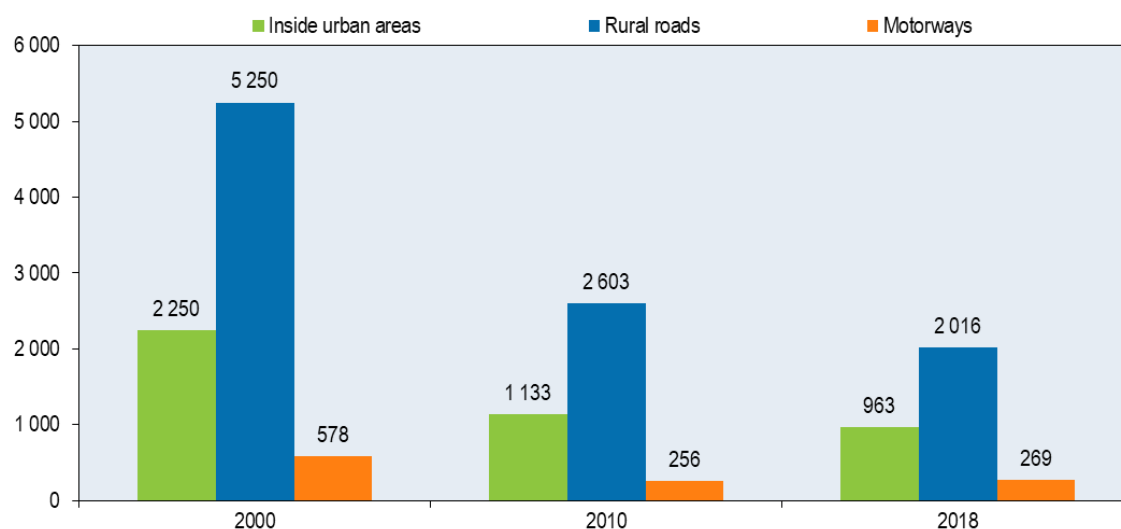
Analysis of **fatalities by road type** shows that the rural network¹ continues to be the deadliest. In 2018, 62% of deaths occurred on rural roads, 30% on urban roads² and 8% on motorways. This split has remained relatively stable in recent years.

Following a strong increase in 2015, the number of fatalities on motorways decreased in 2016 (-28 fatalities, or -9.4%) and in 2018 (-4.6%). There was a slight reduction on rural roads (-1.5%) in 2017. This decline is more pronounced in 2018 (-140 fatalities, or -6.5%), due to a new speed limit entered into force on 1 July 2018 on rural roads without a median separation (80 km/h instead of 90 km/h). Those rural roads witnessed 89% of road fatalities in 2017.

The number of fatalities on urban roads increased by 3.1% in 2016, due to strong growth in pedestrian fatalities (+19.4 %, representing 91 more fatalities than in 2015) and cyclist fatalities (+8.7%, 13 more fatalities than in 2015). In 2018, there were 47 fewer persons killed on urban roads, representing a decrease of 4.7% compared to 2017.

Since 2000, the reduction in the number of road deaths has benefited the whole network to a similar degree of magnitude (-57% on urban roads, -62% on rural roads and -53% on motorways).

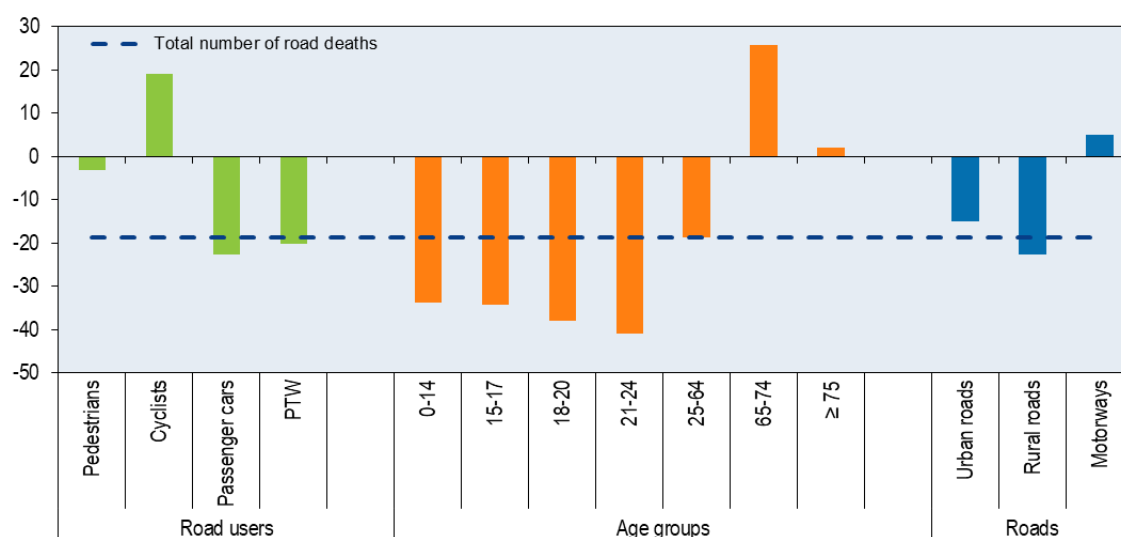
Figure 5. Road fatalities by road type



¹Rural network: network outside built up areas, excluding motorways

²Urban roads: streets and roads within built up areas

Figure 6. Evolution of road deaths by user category, age group and road type, 2010-2018



Fatality data are essential to understand road safety issues, but hardly sufficient. Information on **serious injuries from crashes** is also critically important. IFSTTAR estimates the number of people in road traffic crashes with an injury of a Maximum Abbreviated Injury Score (MAIS) of 3 or more, based on a capture-recapture process using the national injury accident database (BAAC) and the Rhône Register, which records all casualties from road crashes that occurred in the Rhône County.

The number of serious injuries MAIS 3+ was estimated at 25 000 in 2016, corresponding to a ratio of 7 people seriously injured for every road death.

Based on these estimates, on average between 2012 and 2016, 41% of persons injured with a MAIS of three or above were motorised two-wheeler riders, 27% were car occupants, 15% cyclists and 15% pedestrians. This means that nearly 70% of those seriously injured are vulnerable road users.

Economic costs of road crashes

Road traffic crashes represent a significant cost for society, estimated at EUR 44.1 billion or 1.9% of GDP. Costs of road crashes take into account production losses, human cost for the relatives, medical costs and the loss of quality of life. This calculation takes into account estimates of non-reported crashes. IFSTTAR estimates that the number of injured people could be four times greater than the registered number, and the number of hospitalised nearly twice as great.

Table 1. Costs of road crashes, 2018

	Unit cost [EUR]	Total [EUR]
Fatalities	3 360 million	10.9 billion
Hospitalised persons	420 123	17.6 billion
Slight injuries	16 805	4.0 billion
Property damage costs of injury crashes	5 154	0.9 billion
Property damage costs of non-injury crashes		10.7 billion
Total		44.1 billion
Total as % of GDP		1.9%

Behaviour

The behaviour of road users is an important determinant of a country's road safety performance. **Inappropriate or excessive speed** is the leading cause of fatal crashes. In 2018, according to police reports, speed was the primary cause in 27% of fatal crashes.

In July 2018, the speed limit was reduced from 90 to 80 km/h on single carriageway rural roads. A preliminary evaluation of the measure was published in July 2019 and concluded that this measure saved 206 lives in the first 12 months of its implementation (Cerema, 2019).

The 2018 speed measurement campaign indicates a slight decrease in the average speed of passenger vehicles on all networks, except on 2x2 lane roads. On roads limited to 80 km/h since mid-2018, the average speed decreased by 3 km/h 12 months after implementation.

The table below summarises the main speed limits in France.

Table 2. Passenger car speed limits by road type, 2019

	General speed limit	Comments
Urban roads	50 km/h	30 km/h zones are spreading
Rural roads	80 km/h	90 km/h when two lanes in one direction
Dual carriageways	110 km/h	100 km/h in wet weather or for novice drivers
Motorways	130 km/h	110 km/h in wet weather or for novice drivers

Driving under the influence of alcohol is another major cause of road crashes in France. In 2018, 985 persons were killed in an alcohol-related crash. The share of alcohol-related fatalities has remained stable at around 30% since 2000.

Drink driving concerns all age groups, particularly the 18-24 and 25-34 year-olds.

The maximum authorised BAC is 0.5 g/l for all drivers (including cyclists). For bus and coach drivers the maximum authorised BAC is 0.2 g/l. Since 2009 all buses that carry children have alcohol interlocks installed. Since 1 July 2015, the maximum authorised BAC is 0.2 g/l for novice drivers during their probation period. A crash is defined as alcohol-related when any of the active participants has a BAC above the legal limit.

Ifsttar ACTUSAM research showed that the risk of being responsible for a fatal accident is multiplied by an average of 18 for drivers under the influence of alcohol. This factor varies increasingly with blood alcohol content (Ifsttar, 2016).

Experimentation with the use of alcohol interlocks for drink-driving offenders started in December 2016 in some regions. Since September 2019, some drink-driving offenders, subject to a mandatory review by a medical committee, are allowed to resume driving on the condition that they install an alcohol interlock device in their vehicle.

Drugs and driving are (or 'driving under the influence of drugs is') of continuing concern. In 2018, it is estimated that 749 persons (23% of all road deaths) were killed in a crash with a driver under the influence of illegal drugs.

Inserm CESIR research among drivers estimated that 3% of crashes could be attributed to the consumption of prescription drugs. Benzodiazepines (anxiolytic or hypnotic) and antidepressants, widely used in France, are associated with a significant increase in the risk of causing a road crash.

In 2018, among drivers implicated in an accident tested with a BAC above the legal limit of 0.5 g/l, 37% also tested positive in a drug test. Among drivers implicated in a fatal accident tested positive in a drug test, half was also found with a BAC above the legal limit of 0.5 g/l.

Since 2003, driving under the influence of substances or plants classified as narcotics constitutes an offence. Testing is approved for the following categories: cannabinoids, amphetamines, cocaine and opiates. Increased random drug tests, using a saliva-testing kit, will be carried out by the police, which are less expensive than blood tests. After a trial period from December 2015 to June 2016 in 11 counties, saliva-only testing was generalised in 2017. Between January-May 2017 and January-May 2018, the number of drug tests using a saliva testing kit increased by 25%.

In 2018, among the drivers under the influence of a psychotic product, alcohol, or drugs implicated in a fatal accident, half were exclusively under the influence of alcohol, a quarter under the influence of drugs and a quarter combine both.

An increasing problem for traffic safety in France is **distraction**, which includes the use of mobile phones while driving or crossing a street. In 2018, "distracted attention" was noted as the contributing factor of 11% of fatal crashes.

It is forbidden to drive with a hand-held mobile phone, but the use of hands-free mobile phones is tolerated. While phoning when driving is a growing concern, an even greater

concern is the expanding number of communication functions offered by a smartphone. Since 1 July 2015, drivers are prohibited from using any device attached to the ear while driving, whether used for phone calls or for listening to music or the radio (headphones, headsets).

Observations during daytime in 2018 showed that at any time 3.3% of passenger car drivers, 6.4% of light-duty vehicle drivers and 5.3% of heavy vehicle drivers used a handheld or ear-mounted phone. The use of hand-held mobile phones not put to the ear seems to be increasing in cities.

The share of **sleepiness and fatigue** as a causal factor in crashes is especially challenging to detect. According to police records, sickness and sleepiness are the main contributing factor in 3% of fatal crashes. Fatigue or drowsiness is more prevalent on motorways operated under a concession, where it was identified in 25% of fatal road crashes during the period 2013-17. The 4-8 am and 2-5 pm time slots account for half of the fatal road crashes where drowsiness is a contributing factor, 36% and 16% respectively (ASFA, 2018).

Seat belt wearing has been compulsory for drivers and in front seats in rural areas since 1973, in urban areas and at night since 1975 and at all times since 1979. They have been compulsory in rear seats since 1991. Children under 10 must be seated in a rear seat and be adequately restrained, taking into account their weight and height.

The seat belt wearing rate is among the highest in OECD countries; however, there is still room for improvement, especially for rear seats. Over 2013-17, 21% of car occupants killed, 33% of utilitarian vehicle occupants, 28% of heavy truck occupants and 42% of coach occupants killed were not wearing a seat belt or the seat belt was not well buckled up when the crash occurred.

Table 3. Seatbelt wearing rate by car occupancy and road type
Percentages

	2005	2012	2018
Front seats			
Urban roads	94	96	98
Motorways	98	99	99
Rear seats			
Urban roads (adults)	66	71	84
Motorways (adults)	73	84	88
Urban roads (children – use of child restraint)	85	89	90
Motorways (children – use of child restraint)	..	92	91

For powered-two wheelers, **helmet wearing** is the most effective passive safety tool. In France, wearing a helmet was made compulsory in 1973 for motorcyclists with engines over 125 cc and for moped riders and motorcyclists with engines of 50 cc to 125 cc in

rural areas. This obligation was extended to urban areas in 1975. The helmet-wearing rate for motorised two-wheelers (it is difficult to discriminate between mopeds and motorcycles during observations) is almost 100% during weekdays and weekends. On average per year over 2013-2017, 13 drivers and 2 passengers killed were not wearing helmets (8% of moped deaths).

Since March 2017, it is illegal to allow children under 12 to ride a pedal-cycle without a helmet. Failure to do so results in a fine for the parents.

Road safety management and strategies

The number of road fatalities peaked in 1972 with about 18 000 fatalities. France had a fatality rate of 35 deaths per 100 000 inhabitants. Since then, the number of fatalities has followed a downward trend, with fluctuations from year to year. Between 1990 and 2018, the number of road fatalities decreased by 71%.

Between 1990 and 2000, the following important road safety measures were introduced:

- In 1989 the publication of the White Paper on Road Safety paved the way for road safety policies on improving and enhancing enforcement that would come into effect 10 years later.
- The maximum speed limit in built-up areas was set at 50 km/h in 1990, and the maximum allowable BAC was lowered to 0.5 g/l.
- The demerit point system was introduced in 1992.
- Most motorway network construction was achieved during this period.
- Most vehicles were equipped with airbags.
- The educational continuum was implemented.

Despite these measures, fatalities only decreased by 20% during the decade, as traffic increased by 20%. In 2000, there were 15 people killed per billion vehicle kilometres driven and 14 per 100 000 inhabitants. In July 2002, French President Jacques Chirac declared road safety to be one of his four main priorities. Between 2000 and 2010 important advances in road safety included:

- The first permanent automated speed cameras were introduced in 2003.
- A Road Safety National Council was established for public and private stakeholders to meet and present action proposals to the government.
- Probationary licences were introduced in 2004.
- A driver caught exceeding the maximum BAC level would lose six demerit points out of 12 (or 6 out of 6 for drivers in their probation period).

These changes made it possible to break through the symbolic level of 5 000 fatalities per year in 2006. Fatalities fell by 51% over the 10-year period. Experts attribute 75% of the improvement to a reduction in average speed and 11% to improved vehicle safety. At the same time, traffic was up by 7%.

Since 2006, new measures are still being introduced in France, like the development of specific urban traffic areas such as pedestrian zones, or low-speed-limit areas in 2008, and the introduction of the first traffic light cameras in 2009.

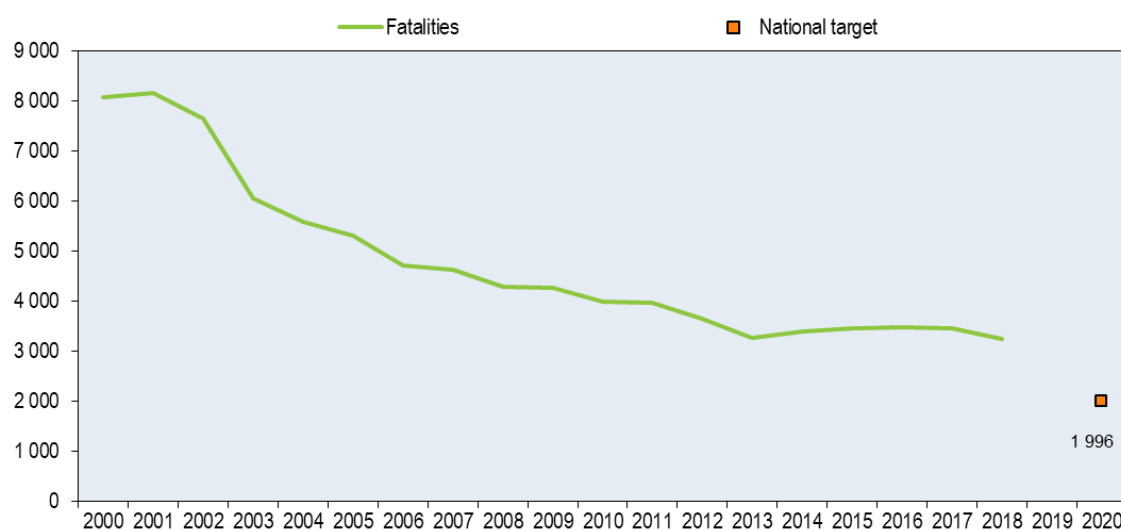
Responsibility for the organisation of road safety in France lies with the Road Safety Directorate which has reported to the Minister of the Interior since 2012. The Minister of the Interior chairs the Inter-ministerial Road Safety Committee, an assembly of representatives of various ministries, where decisions are taken. The ONISR observatory assists the road safety director and is responsible for managing the road traffic accident database, analysing road safety performance and organising research to prepare for new measures and evaluate them. The National Road Safety Council (CNSR) is in charge of presenting road safety action proposals to the government. Its main role is to provide guidance to the government, formulate recommendations and identify objectives to reduce road crashes. It is assisted by an expert committee which provides appropriate technological and scientific input.

The current **target** of the French government is to reduce the number of road fatalities to below 2 000 by 2020, which is in line with the European Commission goal of halving the number of fatalities by 2020. In order to achieve this objective, **key priorities** identified by the government are: the reduction of fatalities among young people, novice drivers and among riders of motorised two-wheelers, and the tackling of the main crash-contributing factors of speed and impaired (alcohol/drug) driving. Priorities are regularly re-formulated in relation to road safety outcomes. The progress towards the 2020 target is measured using national indicators and published each year in the French Road Safety Observatory (ONISR) annual report. The projections of road fatalities produced through the simulation models of population dynamics are also considered as a tool for the management of implemented policies. Based on the results obtained in the past three years, it is unlikely that the target will be achieved.

The Interministerial Road Safety Committee (CISR) met last on 9 January 2018. An 18-point action plan was announced and legislation for the measures is currently being rolled out (see the Measures Chapter below). Objectives are :

- to engage every citizen in road safety
- to protect all road users
- to anticipate to put new technologies at the service of road safety.

In 2017, France adopted the Valletta Declaration, setting a target of halving the number of fatalities and serious injuries in the EU by 2030 from the 2020 baseline.

Figure 7. Trends in road fatalities towards national target

Measures

Road safety management

- During the Road Safety Interministerial Committee (CISR), three key concepts were identified, linked to 18 new measures: the commitment of each citizen for road safety, the protection of all road users, the proactive promotion of new technology for road safety.
- Among these new measures, the speed limit was reduced from 90 to 80 km/h on two-lane single carriageways from 1 July 2018, to reduce the likelihood of collision and severity of injury. Experts estimated that between 350 and 400 deaths could be prevented by this measure as 55% of road deaths in France occur on the 400 000 km of rural roads. This measure includes a review clause in July 2020 and is subject to an assessment (impact on driving speed, road safety performance, social acceptability and socio-economic effects) carried out by Cerema.
- This new CISR also provides for the possibility of suspending the licence of a driver using a mobile phone at the wheel and the development of alcohol interlocks required for recidivist drink-driving offenders (with medical and psychological counselling).
- In order to tackle work-related road risks, companies are called on to respect seven commitments and to ensure appropriate road safety conditions for their employees. So far, in 2018, this call has already been signed by more than 1 300 companies and public administrations, representing 3 million employees.
- In July 2018, a new decree combating the lack of motor vehicle civil liability insurance has been introduced.

- For several years, traffic violations detected by radar have been sent to the country of the offender, in a reciprocal manner between countries. Sweden and the Republic of Ireland have implemented this reciprocity since 24 June 2019. Now, 19 countries of the European Union (EU) are partners with France, four years after the transcription of the European directive into the August 2015 law "Energy transition and green growth": Germany, Austria, Belgium, Spain, Estonia, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, the Czech Republic, the United Kingdom, Romania, Slovakia. A bilateral agreement has been signed with Switzerland.

Regulations targeting road behaviour

- Since September 2018, the sanction is increased for taking a prohibited or counter-directed direction without interception, including by video-verbalisation, for non-compliance with priority rules at pedestrian crossings, and a new sanction has been introduced for vehicles carrying too many passengers
- Since September 2018, the prefect (local government representative) is empowered to accept that first alcohol-offenders could carry on driving provided they do so on a vehicle with an approved electronic **alcohol interlock device**
- By the end of 2019, the hand-held phone coupled with another offence will result in retention of the driver's licence.

Definitions, methodology, data collection

- Road fatality: person who died within 30 days of a road crash. Before 2005, fatalities were accounted for when occurring within six days. For international comparisons, a correction factor of 1.069 is applied for the years before 2005.
- Hospitalised: non-fatal casualty who stayed longer than 24 hours in hospital. Before 2005, this category used the duration of more than 6 days for the hospital stay. In 2018, figures are not available as there seems to be a disruption in the way it is recorded by police forces.
- Slightly injured: non-fatal casualty who received medical care but did not stay in hospital longer than 24 hours (or 6 days before 2005).
- Seriously injured: person who is injured with at least one injury ranking three or more on Maximum Abbreviated Injury Scale (MAIS3+), not including those who died within 30 days.

Proven suicides and intentional murders are not registered as road traffic crashes.

French official road safety information comes from the National Road Traffic Accident (RTA) database which includes results for mainland France only unless specified that data from overseas territories are included.

Road traffic crashes leading to injury are recorded by the police into their own software programme according to a dedicated format, the Injury Accident Analysis Bulletin (BAAC, Bulletin d'analyse d'accident corporel). These files are then gathered centrally through a web-based programme and constitute the National RTA database.

A new information system is currently under development to modernise the data collection process and the analysis of road traffic accident data. The format of the Injury Accident Analysis Bulletin (BAAC) has been revised accordingly (date of implementation from February to July 2018 according to the police forces) to facilitate the work of the police, improve the coherence of statistics and to introduce information about new means of transport or accident factors.

The data collection process is managed by the French Road Safety Observatory (ONISR, Observatoire national interministériel de la sécurité routière), with the assistance of technical teams from the French Research Centre on Risks, Environment, Mobility and Planning (CEREMA, Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement) and the network of local observatories to check and complement the information as necessary.

Monitoring the quality of data is partially ensured by comparing it with the Rhone registry, i.e., information gathered from hospitals in the Rhone region on all road traffic crash victims who received medical care at a hospital. Information on the number of fatalities is considered very accurate and used as a benchmark. Serious injury crashes are usually recorded accurately too, except in the case of single-vehicle crashes involving motorised two-wheelers and cyclists.

There are some variations across the country over the way slight injury accidents are recorded. The French Institute of Science and Technology for Transport, Development and Networks (IFSTTAR) estimates that the number of injured people is significantly underestimated and could be four times greater than the registered number.

Based on the expertise developed by using both the Rhone registry and the National RTA database, IFSTTAR has been tasked with providing a national estimate for MAIS3+ victims to provide the relevant information requested by the European Commission.

Resources

Recent research

In order to meet road safety challenges and to obtain a better understanding of road crashes, the French Road Safety Directorate (DSR) identified seven research priorities for the period 2018 to 2022:

- vulnerable road users
- young and older road users

- reducing the number of serious injuries
- behavioural factors (speed, alcohol, drugs)
- ensuring regulatory compliance and safe traffic
- automated vehicles
- assessment of road safety policies.

As part of this strategy, the Road Safety Directorate launched its first call for proposals 2018-22, with at least one session opened each year. More information is available here: <https://www.onisr.securite-routiere.interieur.gouv.fr/en/road-safety-policy/call-for-research-projects>.

Reduction of speed limits

- The Cerema carried out a study on the first 6 months, then 12 months, of the reduction of speed limitation from 90 to 80km/h on two-way roads outside urban areas which occurred on July 1st, 2018. The results showed a reduction of average speeds between June and September for light vehicles of 3.9 km/h, and a decrease of 1.8 km/h for HGVs, already subjected to an 80 km/h speed limit. The time lost due to the measurement is on average one second per kilometre. There is also a significant reduction in mortality on this network (about 200 lives saved).
- Vehicle Occupant Infrastructure Road User Safety Study (*VOIESUR, Véhicule occupant infrastructure études de la sécurité des usagers de la route*): this project led to the launch of several in-depth analyses from police reports registered in the VOIESUR database (gathering all fatality crash reports and 1 out of 20 injury crash reports in France for 2011). Concerning driving speeds in road crashes, 30% of drivers involved in fatal traffic crashes occurring on rural single carriageways with two lanes exceeded the speed limit.

Work-related road risk

- Since the CISR of 9 January 2018, the government decided to publish an annual report on work-related road risk indicators. This risk is the leading cause of death in the workplace, with 482 workers killed in 2018. Moreover, according to the Rhône register, in 2017 41 000 workers were injured on their commute to work, and 15 000 on a professional journey. This led to 3.9 million days compensated.
- IFSTTAR conducted a study on professional phone use while driving. The results show that 90% of the workers used phones for oral conversations, and 81% for other tasks such as writing messages or handling the phone. 7% of respondents thought that phone use should not be restricted while driving. Also, 2 out of 3 declared that they never had a road safety training in their company.

Elders and road safety

- Thanks to the volunteers of the GAZEL cohort (12 460 participants aged from 62 to 76 years old), INSERM conducted a study on the influence of certain diseases on the behaviour of aged drivers. Parkinson's disease or cardiovascular accidents can be a cause of road crashes, but they do not lead to greater risk: the drivers adapt their behaviour, by avoiding complicated situations, limiting their travels, or even stopping using their cars. However, disorders such as hearing impairment or articular pains lead to a higher risk, due to a lack of adaptation from the driver.
- By the analysis of the VOIESUR database, IFSTTAR carried out a study (COSERA: Senior Driving, responsibility and adaptation) about the determination of liability in fatal crashes. The results show that middle-aged drivers (35-64 years old) are less likely victim of a human failure than other drivers. Also, the study recommends the introduction of personal support for elders drivers, in order to help them to self-assess their ability and knowledge.

Young road users

Road users from 18 to 29 years old represent 24% of the French population and 24% of kilometres travelled, but they account for 40% of the road deaths. Road crashes involving this age group are more likely to happen at peak hours, or by night and during the weekend. Also, this age group is more frequently alleged perpetrator, without a driver's license and under the influence of alcohol than the 30-64 years old. Among the 18-29 years old, the risk is predominant for men (75% of the implicated for 60% of the kilometres travelled) and for students (22% for 13%).

Factors related to lethal accidents (FLAM: Facteurs Liés aux Accidents Mortels)

In 2017-2018, the Cerema set up a database that includes data and information on 85% of fatal crashes that occurred in 2015. With this database, it is now possible to determine crash causation factors. They are divided into four different groups: factors related to the human, to the vehicle, to the infrastructure and to the traffic conditions. Human factors are involved in 92% of fatal crashes and are the sole crash causation factors in 49% of the cases. The main factors are "excessive or inappropriate speed" (38%), "alcohol" (31%), "drug use" (17%) and "non-compliance with priority rules" (16%). Further analysis is on-going.

The study shows that vehicle, infrastructure and traffic conditions factors are involved in 20%, 26% and 13% of fatal crashes respectively.

Websites

ONISR - The French Road Safety Observatory: <https://www.onisr.securite-routiere.interieur.gouv.fr/en>

Road Safety in France: 2018 Annual Report: <https://www.onisr.securite-routiere.interieur.gouv.fr/en/road-safety-performance/annual-road-safety-reports/2018-road-safety-annual-report>

Road safety directorate official website: <https://www.securite-routiere.gouv.fr>

The National Council for Road Safety: <https://www.conseilnational-securiteroutiere.fr/>

IFSTTAR - The French Institute of Science and Technology for Transport, Development and Networks: <https://www.ifsttar.fr/en>

CEREMA – The French Research Centre on Risks, Environment, Mobility and Planning: <https://www.cerema.fr/>

Health and Driving: www.inserr.fr/sante-conduite

Road Safety Foundation: <https://fsr.ifsttar.fr>

UTAC CERAM (Car, Motorcycle and Bicycle Technical Union): <https://www.utacceram.com/>

European centre of studies on safety and risk analysis: <https://ceesar.fr/>

National Agency for Automated Offence Processing: <https://www.antai.gouv.fr/?lang=en>

References

ASFA (2018), *Key figures - fatal accidents on the tolled motorway network*, https://www.autoroutes.fr/fr/accidents_chiffres_cles.htm

Cerema (2019), *Evaluation after 12 months of 80 km/h*, <https://www.cerema.fr/fr/centre-ressources/boutique/abaissement-vitesse-maximale-autorisee-80-kmh>

Ifsttar (2016), *ACTUSAM (update from SAM study about alcohol/drugs in fatal accidents)*, <https://www.onisr.securite-routiere.interieur.gouv.fr/en/knowledge-centre/behaviour-risk-factors/alcohol-illegal-drugs/2016-update-on-sam-research-project-actusam-alcoholillegal-drugs-in-fatal-accidents>

Road safety and traffic data

	1990	2000	2010	2016	2017	2018	2018 % change over			
							2017	2010	2000	1990
Reported safety data										
Fatalities	11 215	8 079	3 992	3 477	3 448	3 248	-5.8%	-18.6%	-59.8%	-71.0%
Injury crashes	162 573	121 223	67 288	57 522	58 613	55 766	-4.9%	-17.1%	-54.0%	-65.7%
Injured persons hospitalised	30 393	27 187	27 732	
Deaths per 100,000 population	19.8	13.7	6.4	5.4	5.3	5.0	-6.0%	-21.1%	-63.4%	-74.7%
Deaths per 10,000 registered vehicles	3.6	2.3	1.0	0.8	0.8	0.7	-6.2%	-25.1%	-67.0%	-79.5%
Deaths per billion vehicle kilometres	26.7	15.6	7.1	5.8	5.7	5.4	-5.8%	-24.8%	-65.6%	-79.9%
Fatalities by road user										
Pedestrians	1 534	838	485	559	484	470	-2.9%	-3.1%	-43.9%	-69.4%
Cyclists	437	270	147	162	173	175	1.2%	19.0%	-35.2%	-60.0%
Moped riders	716	456	248	121	117	133	13.7%	-46.4%	-70.8%	-81.4%
Motorcyclists	1 031	937	704	613	669	627	-6.3%	-10.9%	-33.1%	-39.2%
Passenger car occupants	6 862	5 291	2 117	1 760	1 767	1 637	-7.4%	-22.7%	-69.1%	-76.1%
Other road users	635	288	291	262	238	206	-13.4%	-29.2%	-28.5%	-67.6%
Fatalities by age group										
0-14 years	546	363	130	108	104	86	-17.3%	-33.8%	-76.3%	-84.2%
15-17 years	472	350	161	96	101	106	5.0%	-34.2%	-69.7%	-77.5%
18-20 years	1 153	857	370	263	246	230	-6.5%	-37.8%	-73.2%	-80.1%
21-24 years	1 594	869	461	334	316	273	-13.6%	-40.8%	-68.6%	-82.9%
25-64 years	5 784	4 157	2 105	1 790	1 812	1 711	-5.6%	-18.7%	-58.8%	-70.4%
65-74 years	756	624	264	320	342	332	-2.9%	25.8%	-46.8%	-56.1%
≥ 75 years	882	718	499	566	527	510	-3.2%	2.2%	-29.0%	-42.2%
Fatalities by road type										
Urban roads	3 940	2 250	1 133	1 019	1 010	963	-4.7%	-15.0%	-57.2%	-75.6%
Rural roads	6 542	5 250	2 603	2 188	2 156	2 016	-6.5%	-22.6%	-61.6%	-69.2%
Motorways	732	578	256	270	282	269	-4.6%	5.1%	-53.5%	-63.3%
Traffic data										
Registered vehicles (thousands)	30 869	35 874	40 181	43 026	43 451	43 653	0.5%	8.6%	21.7%	41.4%
Vehicle kilometres (millions)	419 772	518 248	560 429	599 640	606 042	606 297	0.0%	8.2%	17.0%	44.4%
Registered vehicles per 1,000 population	545.6	609.5	640.2	667.4	672.4	674.7	0.3%	5.4%	10.7%	23.7%