



ROAD SAFETY ANNUAL REPORT 2019

ARGENTINA

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In 2018, 5 493 road fatalities were recorded in Argentina, representing a 2.1% decrease compared to 2017. The mortality rate was 12.3 deaths per 100 000 inhabitants. Argentina has developed a new data collection system which is in use in 17 of the 24 provinces. In 2017, this new system allowed Argentina to use data collected primarily from police reports to estimate for the first time the share of different user groups in total road deaths. These data revealed that motorcyclists were not only the main traffic casualties, but also that their share in total deaths is increasing; in 2018 they represented 44% of all road deaths opposed to 40% in 2017.

Trends

Argentina registered a modest **decrease in the number of road deaths in 2018**. According to the final data provided by the 24 jurisdictions, 5 493 persons lost their lives in traffic crashes in Argentina in 2018. This represents a 2% decline compared to 2017. In 2017, 5 611 road deaths were reported, a 1% increase from 2016.

From 2010 until 2017, the number of road fatalities has shown an upward trend, part of which might be due to data collection improvements. The decrease observed in 2018 shall be monitored to see how it evolves in the future years.

The number of **traffic deaths per 100 000 inhabitants** in Argentina fell by 1% between 2010 and 2018. In 2018, 12.3 traffic deaths per 100 000 inhabitants were recorded, compared to 12.5 in 2010. By way of comparison, the average in the European Union was 4.9 deaths per 100 000 inhabitants in 2018.

Argentina recorded 2.2 **fatalities per 10 000 registered vehicles** in 2018. This represents a decrease of 23.4% compared to the year 2010, when the rate of deaths to registered vehicles stood at 2.9.

Country Profile

Population in 2018: 44.5 million

GDP per capita in 2018: 11 652 USD

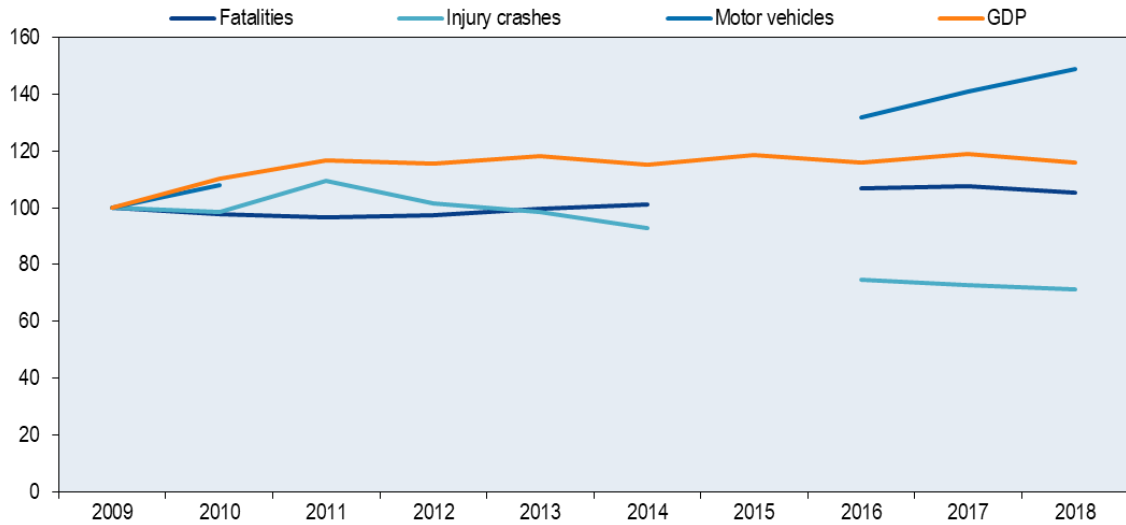
Cost of road crashes: 1.7% of GDP (2017)

Registered motor vehicles in 2018: 24.5 million (cars 65 %; motorcycles 34 %; agricultural machines, vans and buses: 2

Speed limits: 40 km/h on urban roads; 110 km/h on rural roads; 110 km/h on motorway

Limits on Blood Alcohol Content: 0.5 g/l for car drivers; 0.2 g/l for motorcyclists; 0.0 g/l for professional drivers and novice drivers

Figure 1. Road safety, vehicle stock and GDP trends
Index 2009 = 100

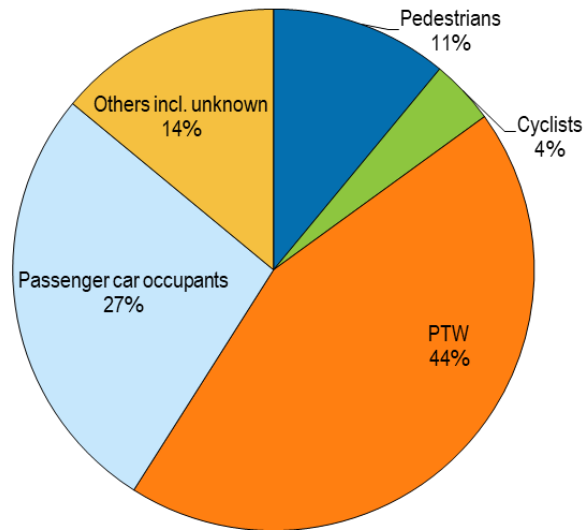


The picture for **fatalities by road user groups** shows that riders of motorised two-wheelers are most affected by road crashes. In 2018, motorised two-wheeler users accounted for the largest share of road deaths, with 44% of the total. They were followed by passenger car occupants (27%), pedestrians (11%) and cyclists (4%). However, the analysis should take into account that almost 5% of road fatalities were not attributed to any categories.

The number of road fatalities marked with an “unknown” road user group fell by 28% in 2018 compared to the year prior - a welcome improvement in the accuracy of data reporting. However, this prohibits comparing figures from 2017 and 2018, as road fatalities designated to their proper road user groups in the 2018 data are likely to have inflated totals compared to 2017.

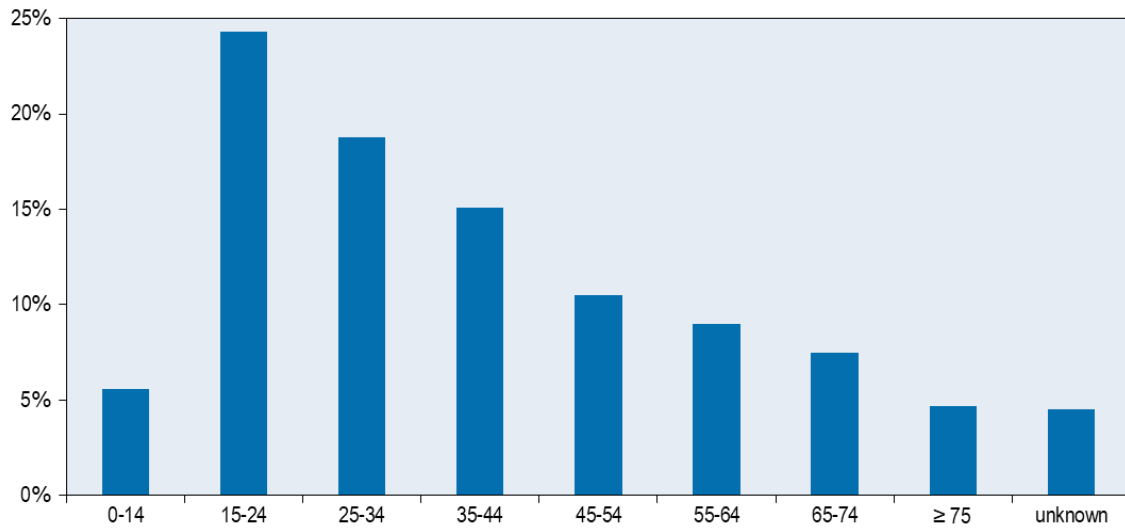
The high share of motorcycle fatalities stands out as a key issue for Argentinean road safety. Health records suggest that the growing share of motorcyclists among road casualties is the result of a process that has been occurring for at least the last decade (ANSV, 2018).

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



Road deaths by age group in 2018 showed that young people and young adults are the most affected by road crashes. In 2018, 58% of all road deaths were between 15 and 44 years old. The 15-24 age group alone represented 24% of traffic fatalities.

Figure 3. Road fatality rates by age group, 2018
Percentage of total



Analysis of **fatalities by road type** shows that the urban network claims the most victims. It is difficult to compare year-on-year changes in fatalities by road types due the large proportion of deaths marked as unknown.

Economic costs of road crashes

For the first time in history, Argentina has an official estimate of the social cost of road crashes, which amounted to around USD 9.42 billion in 2017, or 1.7% of GDP in 2017. The methodology chosen to estimate crash costs combines the human capital approach with an estimate of the statistical value of life to take into consideration the grief and pain caused by premature death and serious injuries. More information can be found at: <https://www.argentina.gob.ar/seguridadvial/observatoriovial>.

Table 1. Estimated cost of road crashes in USD million, 2017

Item	Fatalities	Serious injuries	Slight injuries	Total
Medical costs	0.20	5.96	2.31	8.47
Productivity loss	864.88	22.61	3.43	890.91
Human costs	8 316.80	175.15	-	8 491.95
Property damage costs	1.17	1.79	13.58	16.45
Administrative costs	9.19	1.66	0.35	11.20
Total	9 192.24	207.07	19.64	9 418.98
Total as % of GDP				1.7

The figures shown will be updated in 2020 for the year 2018.

Behaviour

The behaviour of road users is an important determinant of a country's road safety performance. Unfortunately, there are not yet local studies reflecting the influence of each risk factor on the occurrence of road crashes. However, international evidence suggests that **speed**, and especially excessive or inappropriate speed, could be an important cause explaining both occurrence rates and injury severity.

General speed limits are summarised in the following table.

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

	General speed limit
Urban roads	
Main roads	60 km/h
Residential streets	40 km/h
Interurban high speed roads	
Single carriageway	110 km/h
Expressway/motorway	120-130 km/h

The national traffic law prohibits driving with a **blood alcohol concentration** (BAC) above legal limit, or "having consumed illegal or legal **drugs** that reduce the ability to drive". The maximum authorised BAC level is 0.5 g/l for car drivers, 0.2 g/l for motorcyclists and 0.0 g/l for professional drivers.

Since 2016, the National Road Safety Observatory collects data from different jurisdictions that carry out breath tests on drivers to detect traffic law violations. A new study based on a sample of more than 48 000 drivers shows that approximately 9.4% of drivers have a BAC level above the maximum authorised level. This proportion is higher for young drivers (11.2% for 16-24 year-olds and 12.7% for 25-34 year-olds). Men are more likely than women to drive with a BAC above the legal limit (9.9% vs. 5.2%). Motorcyclists show a higher prevalence of positive cases than car drivers (23.1% vs. 8.7%). More information can be found at:

<https://www.argentina.gob.ar/seguridadvial/observatoriovial>.

The table below summarises some of the main results of this study.

Table 3. Share of drivers with a BAC above the legal limit

	Max. authorised BAC (g/l)	% of positive cases	Sample size	% of sample size
Car drivers	0.5	8.7	40 974	84
Motorcyclists	0.2	23.1	2 934	6
Professional drivers	0.0	8.4	4 872	10
Total		9.4	48 780	

Note: The sample was taken by traffic agents of 38 municipalities distributed on 16 different provinces, and by six provincial police bodies during the period December 2016 – June 2018.

Updated representative statistics showing the link between impaired driving and road crashes are lacking. However, 2012 research by SEDRONAR estimated that 22.5% of drivers in a sample of 1 777 road casualty cases treated in emergency rooms had consumed some type of psychoactive substance (including alcohol). Such results were based on a declarative survey. The real extent of the problem is most likely underestimated. The survey was updated in 2018 with a sample of 1 227 cases (road injuries only). Among injured drivers, 25.1% admitted having drunk alcohol within a six-hour timeframe before the crash, while 3.6% admitted having smoked marijuana and 2.0% cocaine. In summary, a total of 28.0% of injured drivers declared having consumed a psychoactive substance before driving.

An increasing problem for traffic safety in Argentina is **distraction**. The national traffic law prohibits the use of hand-held mobile phones and electronic devices, DVD players and similar devices while driving. In 2018, a nationwide observational study based on a sample of more than 95 000 cars and 38 000 motorcycles showed that at any time 16.8% of car drivers and 10.5% of motorcycle drivers were distracted. The percentage of distracted drivers increased when compared with the 2016 survey (with distraction rates of 12.1% and 8.2% respectively). The main distracting factor was the use of mobile phones while driving a car (9.4%) and transporting objects when driving a motorcycle (ANSV, 2018). Currently there is no data on the share of crashes due to distracted driving.

The share of **fatigue** as a causal factor in crashes is especially challenging to detect but nevertheless an important issue. National legislation requires professional drivers to rest

eight hours after eight hours of driving. Surveillance measures focus heavily on professional drivers of long-distance public transport.

Seat belt wearing has been compulsory in Argentina since 1995 in front and rear seats. The wearing rate is still very low in comparison to most OECD countries despite some improvement since 2011. Based on observational surveys, about 55% of drivers and 42% of front seat passengers wore their seatbelts in 2018 (ANSV, 2018). In the rear seats, only 20% of adult passengers were buckled. Declarative surveys conducted in 2016 indicated a much higher use of seatbelts (87% for front seat passengers instead of 43% in the observational surveys) (ANSV, 2016). However, observational surveys are considered to be a much more reliable source of information.

For motorcyclists, **helmet wearing** is the most effective passive safety habit. All riders of motorised two-wheelers are required to wear helmets in Argentina. In 2018, it was estimated that 69% of motorcycle riders and 42% of passengers wore a helmet (considering only the first passenger) (ANSV, 2018). These results show a statistically significant increase in helmet rate use by riders, but stagnation in helmet use by passengers when compared with the last survey in 2016. These figures are still rather low and suggest that many lives could be saved and serious injuries prevented if the use of helmets by all riders was nearer 100%.

Road safety management and strategies

Responsibility for the organisation of road safety in Argentina primarily lies with the National Road Safety Agency (ANSV), created in 2008 under the Ministry of the Interior and Transport. The Agency has three councils and committees: a Federal Council, represented by one member of each province; a Scientific Committee, composed of expert members, engineers, doctors, etc.; and a Consultative Committee, represented mainly by relatives of road safety victims.

Argentina updated its road safety strategy in 2016, covering a ten-year period. The strategy set a target of a 30% reduction in the number of people killed or seriously injured by 2026. The strategy focused on strengthened institutional coordination across the different levels of government, traffic law enforcement, education and road safety campaigns, safer vehicles and infrastructure, and post-crash response.

Since its inception, the focus of the ANSV has been the creation of a national driver's licence, a national education plan, a national monitoring plan and the development of the National Road Safety Observatory. However, as Argentina is a federal country, provinces are empowered to accept or reject recommendations by the national government, as represented by the ANSV.

Measures

As a federal country, most of the decisions regarding road safety are taken at provincial and municipal levels. Several measures to **improve road safety management** have

recently been put into place, especially to foster co-operation between federal, provincial and municipal levels. These include:

- The promotion of a multi-sector roundtable comprised of organisations from national, provincial and local levels.
- The promotion of Provincial Road Safety Observatories: 19 out of 24 provinces have signed agreements to implement them; 14 are already in operation (with different levels of development).
- The creation of a Victim Counsel Network, with participation of the 24 provincial jurisdictions. This network will provide legal, social and psychological assistance to crash victims, their families and friends.
- The strengthening of the examination standards throughout the country to obtain a driving license and the securisation of the driving licence card to eliminate the risk of falsification.
- The development of a unique road safety data collection and analysis system, called SIGISVI, for the whole federal country.

Additionally, a number of communication actions and training courses targeting **road user behaviours** were initiated in 2018, including:

- A National campaign to increase helmet and seatbelt use, which was intensively broadcasted.
- The Impaired Driving Road Safety Programme is being developed by an array of institutional stakeholders. It will consist of a national campaign and communicational strategy and the development of protocols and strategies to maximise the dissuasive effect of police enforcement.
- Training courses throughout the country to promote a deep cultural change regarding attitude towards road safety. These courses target ANSV's road agents; school teachers, in order to introduce road safety at all three school levels; and traffic police officers.
- Online courses for cyclists, school teachers, citizens and road agents.
- Educational programmes for different education levels, with the support of the Ministry of Education, public and private institutions and NGOs.

Traffic enforcement is also being reinforced through the introduction of SICAM (National Records and Infractions System with Webcams). This technology has been implemented in 13 capital cities.

Regarding the **safety of vehicles**, the Fifth National Agreement was reached with car manufacturers in 2017 to introduce safety standards in cars. **Motorcycle safety** is also a

key priority in Argentina, where a Second National Agreement was reached with motorcycle manufacturers.

Main federal efforts regarding **infrastructure safety** concern the Road Safety Audit Guide, which was launched in 2019.

Definition, methodology, data collection

- Road fatality: Person killed in a traffic crash or within 30 days of the crash due to injuries sustained in the crash.
- Serious injury: Non-fatal casualty who stayed more than 24 hours in hospital.
- Slight injury: Non-fatal casualty admitted to hospital for less than 24 hours.

The 24 Argentinean jurisdictions send monthly road crash data to the ANSV. Currently, there is a transition between the old statistic reporting tools and the new one. This implies that the statistical yearbook is built by analysing data coming from different supports, ranging from an aggregated data sheet to a quite detailed database.

In order to get more detailed road crash statistics, the Argentinean road safety statistical form (Spanish acronym: FEU) was implemented in 2010. This form is mostly used together with the online software called SIGISVI which enables the digitalising and systematising of the information. In 2017, 17 of the 24 Argentinean provinces used this software to report detailed data on road crashes. One province still sends the statistical forms by post to ANSV, which then digitalises them.

Figures obtained from this source of information often demonstrate that there is a large amount of underreporting with the more advanced tool, when compared with the traditional reporting tools. Therefore, more efforts are needed to improve the coverage of the detailed database.

The ANSV is currently working closely with the 24 jurisdictions in order to improve their crash data collection process. In 2018 and 2019, the Agency visited most of the provincial agencies in charge of road safety statistics, to provide training and create a network of local road safety observatories.

Although the data collecting process has shown advances in many provinces, evidence-based decision making still remains challenging. There is an important gap that needs to be narrowed between policy makers and technical teams.

Since 2010, the ANSV has been working with the Ministry of Health to link hospital records and the FEU Form data. However, very modest progress has been attained so far due to the diverse complexities of the Argentinean health system.

Resources

Recent research

During 2018 and 2019, the National Road Safety Observatory published the results of the following studies:

- Understanding the belief system of young people around alcohol consumption and road safety
- Why do children move unsafely? Understanding the roots of the problem
- The use of safety elements in Mendoza Province: Study of a road safety success case
- Estimation of the global burden of disease caused by road crashes, Santa Fe Province, 2015-2016
- Estimation of the global burden of disease caused by road crashes, City of Buenos Aires, 2017
- Estimation of the global burden of disease caused by road crashes in Argentina, 2017
- Statistical report: BAC testing on drivers
- Lifestories of those injured in traffic
- Developing a methodology to study risky pedestrian behaviours
- Alcohol and other psychoactive substances consumption by those injured in a road crash
- Estimation of the cost of road crashes for Argentina in 2017.

Results highlighted the need to design an integral approach to tackle the issue of drink driving among young people; to widely spread information regarding the existence and usefulness of child restraint systems (and that their use is enforced by law) and to improve their economic accessibility; to guarantee market availability of helmets for children; and to improve public transport attractiveness in order to provide motorcycle users with a safer alternative. Also, the establishment of policy priorities, their coordination among different levels of government and the involvement of non-governmental organisations (among others) proved to be key elements for Mendoza Province to reach the highest safety belt and helmet use rates. The need for more and better police enforcement strategies was a common denominator of these studies.

Websites

National Road Safety Agency (ANSV): <https://www.argentina.gob.ar/seguridadvial>

National Road Safety Observatory:

<https://www.argentina.gob.ar/seguridadvial/observatoriovial>

References

ANSV (2018), *Observational study on road users' behaviour*.

ANSV (2016), *Road safety survey on road user's perceptions*.